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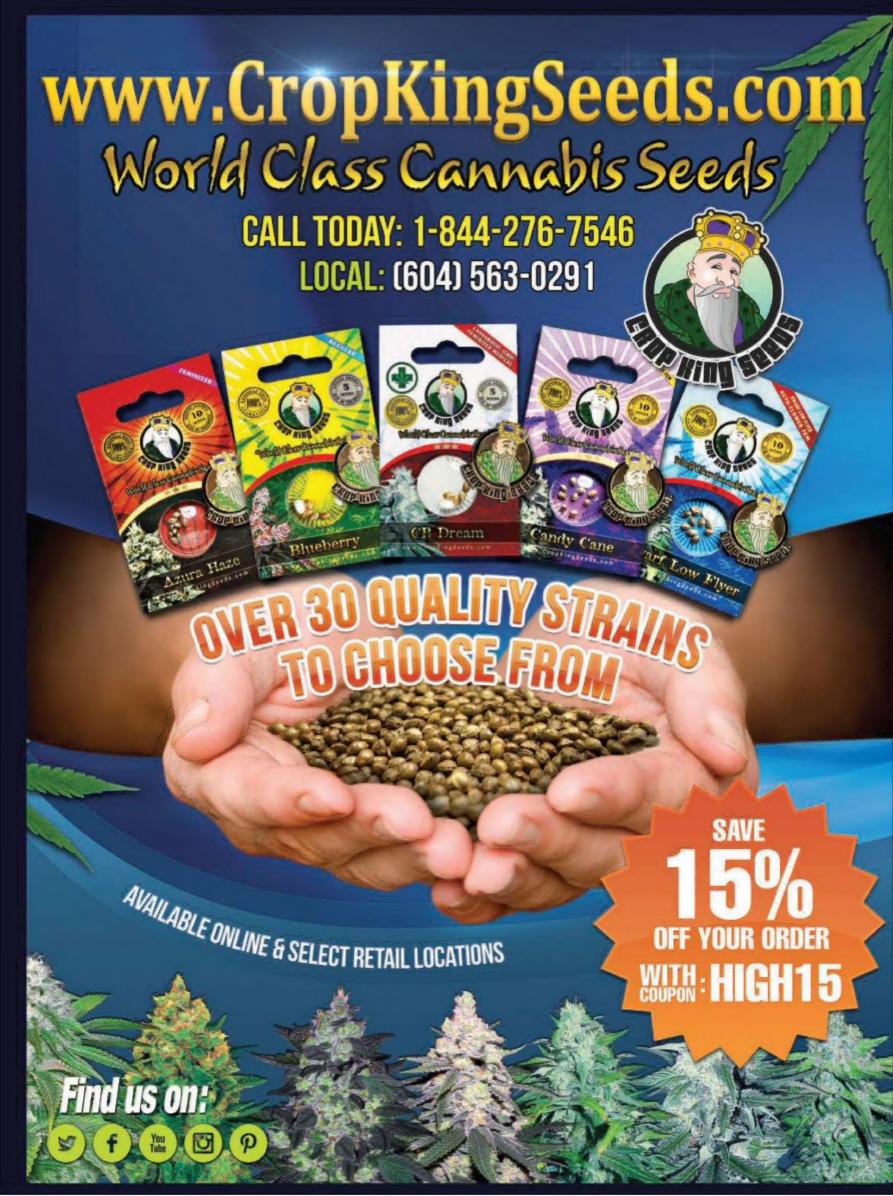
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Hundreds of attendees roamed around, passing joints, lighters and butane, as the assembled vendors showed off their dankest products.

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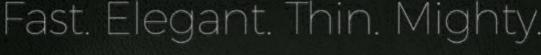
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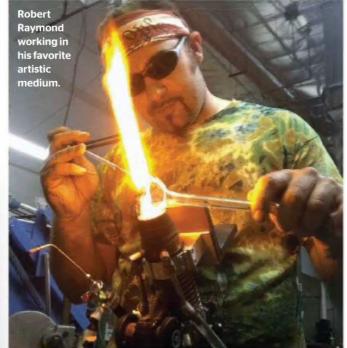
HIGH TIMES COM

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Here at High Times, we like our twax joints ornate! Good thing for us, @ chewberto 420 feels the same way. According to the photog, this work of art is a Hell's Angel OG joint with God's Gift, Honeybee and Sour Diesel rosin and some Sour D drysift as well. It almost looks too good to smoke. Almost.





P Glass Artist of the Month: Robert Raymond Robert Raymond (aka Drakken Glass) has been fascinated by glass art from an early age. A collection of soft glass marbles

glass art from an early age. A collection of soft glass marbles inspired him to start making Venetian glass bead jewelry at the age of 10. As glass pipes and tubes became more popular in the late 90s, he began collecting glass pieces on his travels and developed a deep appreciation for the craft.

Raymond has worked in many different creative mediums including ceramics, oil paints, photography and film. But in 2007, after crafting lamp-worked borosilicate, he purchased a basic glass setup and took the plunge. Drakken Glass has been heating up the glass scene ever since.

"I see a world of possibility for this art medium," Robert says. "In fact, the next generation of artists is already tirelessly working on their craft!"

Check out Robert's work at drakkenglass.com.

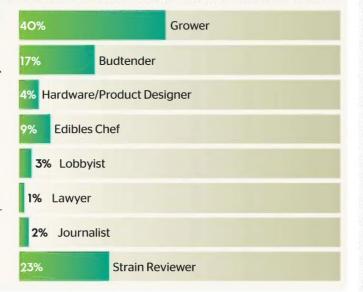
POT POLL

What's Your Ideal Pot Job?

No market is experiencing job growth quite like the cannabis industry. There are thousands of newly created jobs in this burgeoning market. And, best of all, there's a position to match just about every skillset. From budtenders and growers to journalists and lawyers, the marijuana industry has something for everyone. The only question is, which pot job would you most like to have?

We queried our readers about their ideal pot job and, unsurprisingly, found that most would like to tend a garden and grow pot (40 percent). Strain reviewer was the second most coveted pot job according to our poll, receiving 23 percent of the vote, while budtender came in third with 17 percent. Interestingly, lawyer was the least desirable pot job according to our readers, garnering just 1 percent of the vote.

Cast your vote in our latest poll online!





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Tweet your best high observations and comments our way @HIGH_TIMES_Mag for a chance to be featured on this page! And be sure to follow us on Facebook (Facebook/HIGHTIMES-Mag) and Instagram (@hightimesmagazine) for all the latest news as it's happening!

@vivianmcpeak - @HIGH_TIMES_ Mag Dan Skye is a high guy with a red eye and a pot pie to live by like a 420 Jedi who knows why the pot culture gets so high!

@xwolfman87x - Friends don't let friends smoke #weed alone #gethigh #ononlythebest #bud @ HIGH_TIMES_Mag

@OGQuinnmontana - I bet working for @HIGH_TIMES_Mag would be dope.

@Mendacity_Q - @HIGH_TIMES_ Mag Coconut oil or Butter are a more flexible medium for edibles because not everything tastes good with Bacon fat.

@rodney94johnson - @HIGH_ TIMES_Mag I visited Colorado and high country healing, I have reached Mecca, I can die comfortably now:-)

@TheHorseAwakens - @ HIGH_TIMES_Mag btw GSC always seems to disappoint me, idk why

@MuseMan82 - @HIGH_TIMES_ Mag This is so gross. With the rapists, child molesters, murderers in every town they go after the cannabis shops.

@bawiman32 - @HIGH_TIMES_ Mag Take the fight to NY legalize it

@RetroLobbyInk - @HIGH_TIMES_ Mag Monsanto should be put out of business.

@AngGrinch - @HIGH_TIMES_Mag #FDA approved all the #BigPharma drugs that are killing us #fentanyl #Prince the drug kingpins need to be held responsible

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12 Editor's Letter
High Times October 2016



Canna Careers Are Here!

t's been two years since cannabis became legal, thanks to Colorado, Washington State and D.C. Since 2014, both Oregon and Alaska have joined the ranks allowing for adult use, along with half of the US having passed some form of medical marijuana law.

With these state level decisions passing, the growth of the industry has been nothing short of astronomical, creating tax windfalls and tremendous opportunities to land jobs in the marijuana industry. Yes, that's right—we're talking an entire industry taking shape in America and we, the cannabis consumers, ganjapreneurs, activists and supporters are here to ensure that we have a hand in how it all plays out.

And the time to get into the green—to actually make some green—is now. Cannabis is responsible for creating thousands of new jobs, and if you're ready to take that first step to get your foot in the door, turn to page 58.

Don't worry, we're still in the business of teaching you how to grow, and cultivation editor Nico Escondido gets deep into the spectrum for lighting your ladies with his article on "Light Nutrition," on page 89.

Senior cultivation editor Danny Danko dives deep into the strain history of Chem Dog on page 74—see if you can catch all the Grateful Dead references of this popular strain, which originated during their '91 tour.

Speaking of the Dead, we're thrilled and honored that Grateful Dead drummer Bill Kreutzmann sat down with *High Times* to discuss the acid tests, growing his own, and why he prefers vaping. All this and more from Billy can be found on page 107.

Finally, if you haven't attended a Cannabis Cup but want a peek at what the experience is like—check out our SF Cup story "Medicating by the Bay" (p.47) and "Summer Magic in Michigan" (p.97).

Keep on truckin',

Jen Bernstein
Managing Editor

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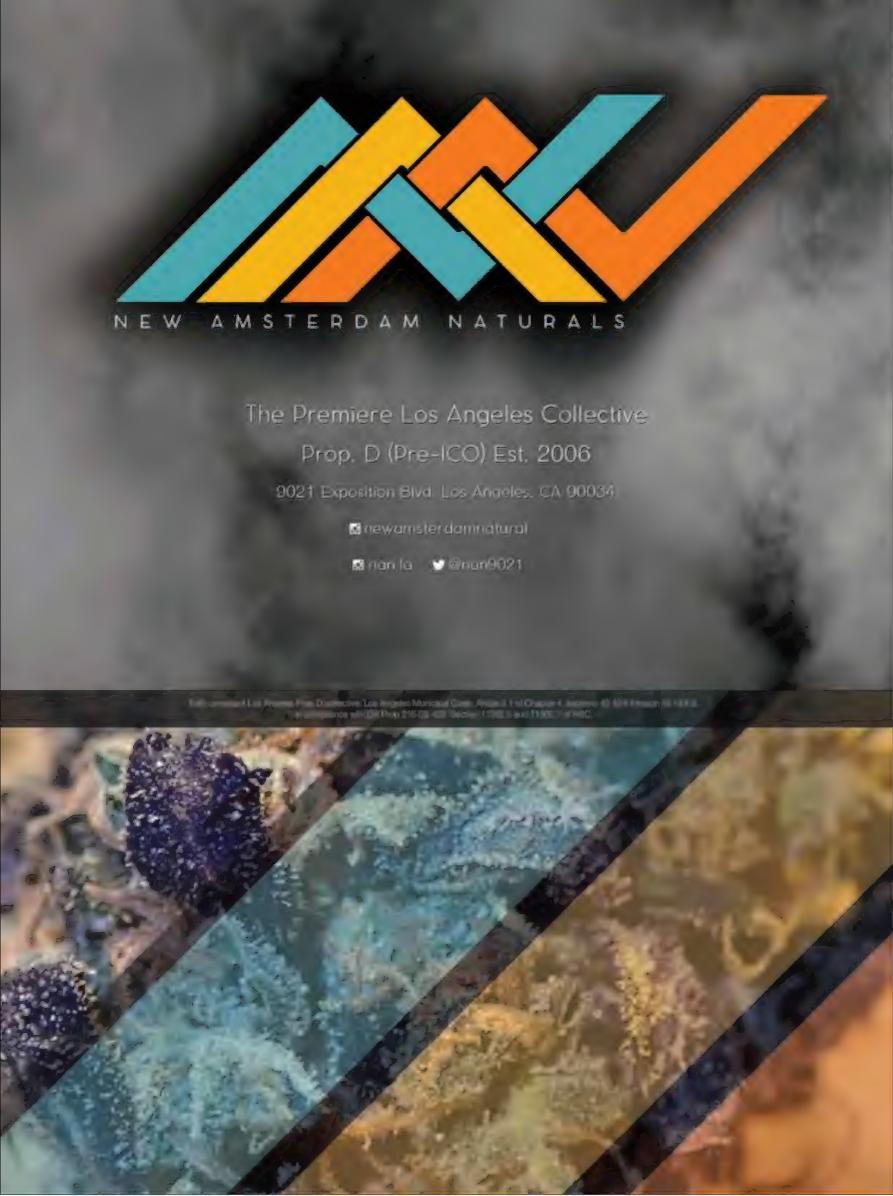
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Oil Refinery

In "Fat City," (July '16), Elise McDonough discussed the best fats and oils to use for cannabis infusions. I believe a good one was overlooked! I use hempseed oil. It tastes great and seems to be pretty strong—even when I use trash trim! Any thoughts?

William H.

HT edibles editor Elise McDonough responds: Hempseed oil is an excellent source of balanced amino acids, but it has a low smoke point compared to other oils and fats, making it undesirable for most types of high-heat cooking. Hempseed oil can also turn rancid quickly, so it needs to be stored in a fridge and used within a week of infusion. With this in mind, a cannabis infusion using hempseed oil can definitely be successful, but be sure to simmer it in a double boiler or crockpot on the "low" setting. The finished infusion is best suited to low-heat or no-heat preparations like salad dressings.

Acid Test

I'm currently a senior at Brooklyn Technical High School enrolled in the AP (advanced-placement) research class, in which students must choose a topic of inquiry for a research paper. For my paper, I wanted to determine if LSD is a viable and safe treatment for chronic alcoholism and other mental maladies such as depression and anxiety.

My goal was to find out how efficient psychedelic therapy using LSD has been compared to standard therapy and psychiatric assistance, the most common methods of treatment. To determine this, I used data analysis, a quantitative research method in which one collects and compares data from various sources and observes any trends or differences among them. What I found was that psychedelic therapy for chronic alcoholism had double the success rate of standard-therapy treatments over an eight-to-12-month period. From my data, I also concluded that LSD is a safe drug to use in the moderate-dose range, with no physical or mental harming effects.

In conclusion, I want to raise awareness regarding this promising medical breakthrough, which can benefit millions of Americans who suffer from various mental-health issues. Psychedelic therapy is in need of government funding to enable its widespread medical use. The benefits of LSD and other safe psychedelic drugs like psilocybin are not just limited to alcoholism, depression and anxiety; these treatments can potentially help veterans suffering from



Psychedelic therapy for chronic alcoholism had double the success rate of standard-therapy treatments.

PTSD as well as terminally ill cancer patients, who often suffer from severe cases of anxiety.

Jeremy Hernandez New York City

Great work, Jeremy! As you probably know, last month's issue of *HT* (September '16) explored the medical benefits of psychedelics, including many of the issues you mentioned.

Medical Malpractice

I'm 74 years old. I've had five laminectomies and many other ailments. I take no meds for pain-sometimes a bit of Valium. I had a bad flu that left me very sick with bronchitis. In my dialogue with a doctor via e-mail, I asked him why he wouldn't prescribe me Phenergan with codeine. He told me that he doesn't give controlled substances to habitual marijuana users-yada yada. He never asked to see me. Today, my internist made me go to urgent care. The X-ray showed that my right lung had been affected. A doctor there gave me a codeine syrup and albuterol. He told me that no one had ever died from using marijuana.

The other doctor was a lung specialist. He should either retire or be removed

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from practice, because he is doing his patients a disservice. He should not let his personal opinion on marijuana interfere with people's

Judith R.

Snaps for BHO

care!

A little while ago, Michigan had dispensaries for a minute, and we got familiar with concentrates. I found a simple way to burn most BHOs: Take a pin, or something similar, and use it to put a drop of wax on the corner of a rolling paper. Fold the corner over and press it as tight and as flat as you can. Cut the folded piece off with scissors and put it into a bowl with a screen. Apply a serious flame to it. (A Bic works great.) The paper will sizzle. Then, in a flash, the hit will vaporize. You can clearly see the effectiveness upon experimenting. We started calling these "snaps." They're also relatively mild, since it's a very small portion of BHO, so they're good for novices. I can smear an entire rolling

paper and cut out many for future use. Of course, I suggest using hemp papers. *Robert Curtis Worrell*

Editor's note: Mr. Worrell's son submitted this letter with the following postscript: "My dad prepared this letter before he passed away. He was a legal Michigan medical cardholder who was told he would be arrested and homeless if he used his medicine. He lived in public federal housing. Less than six months after being told this, he died from alcohol consumption. These laws must be fixed. We cannot lose any more good people over this. No exceptions!"

Slow Your Troll

Just wondering. You're big into weed. Is there anyone who wants weed that *doesn't* have it? Like, is there anyone who wants weed that can't find it or something? Seems legal.

Nicholas

Well, except for the fact that, according to FBI statistics, someone gets busted for pot in this country every single minute, and more than 11,500 people are currently in prison on marijuana charges alone, according to a 2015 report by the US government. But maybe you like asking stupid questions?



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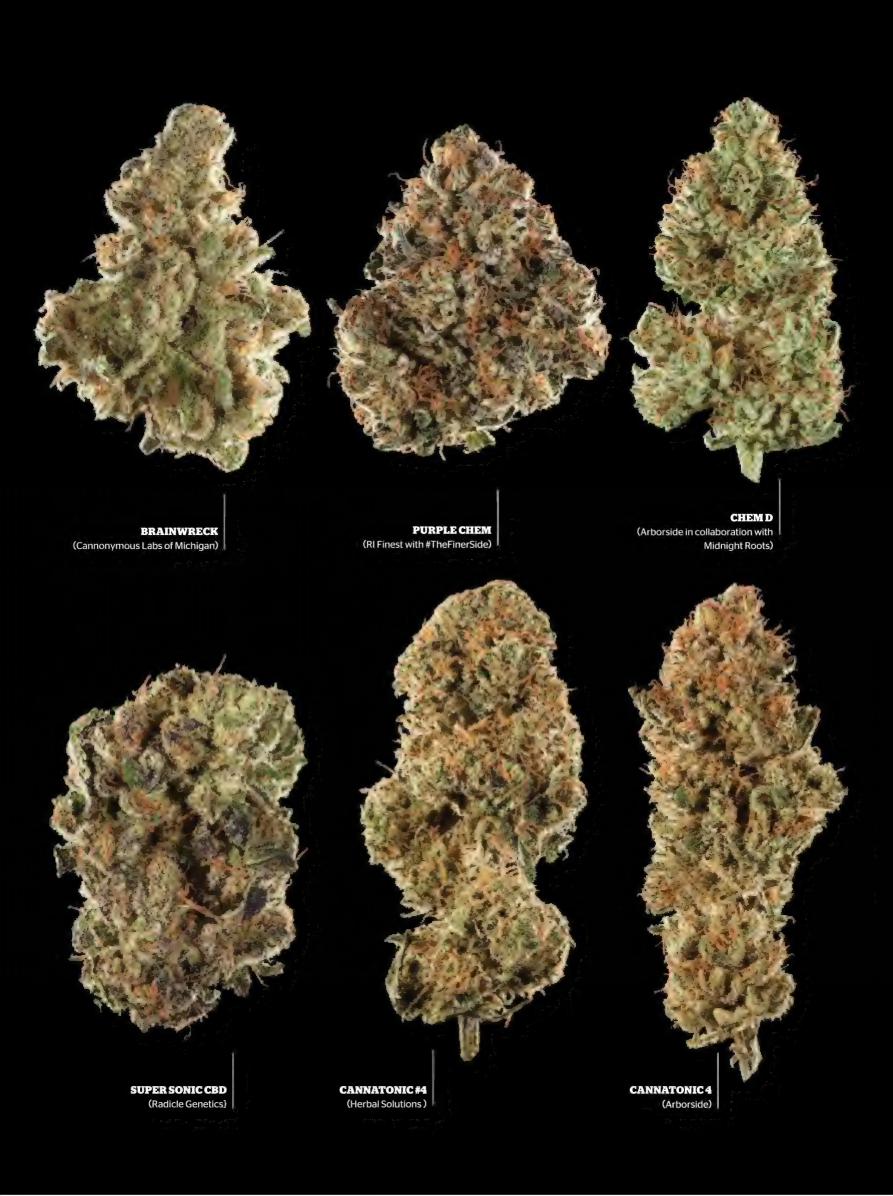
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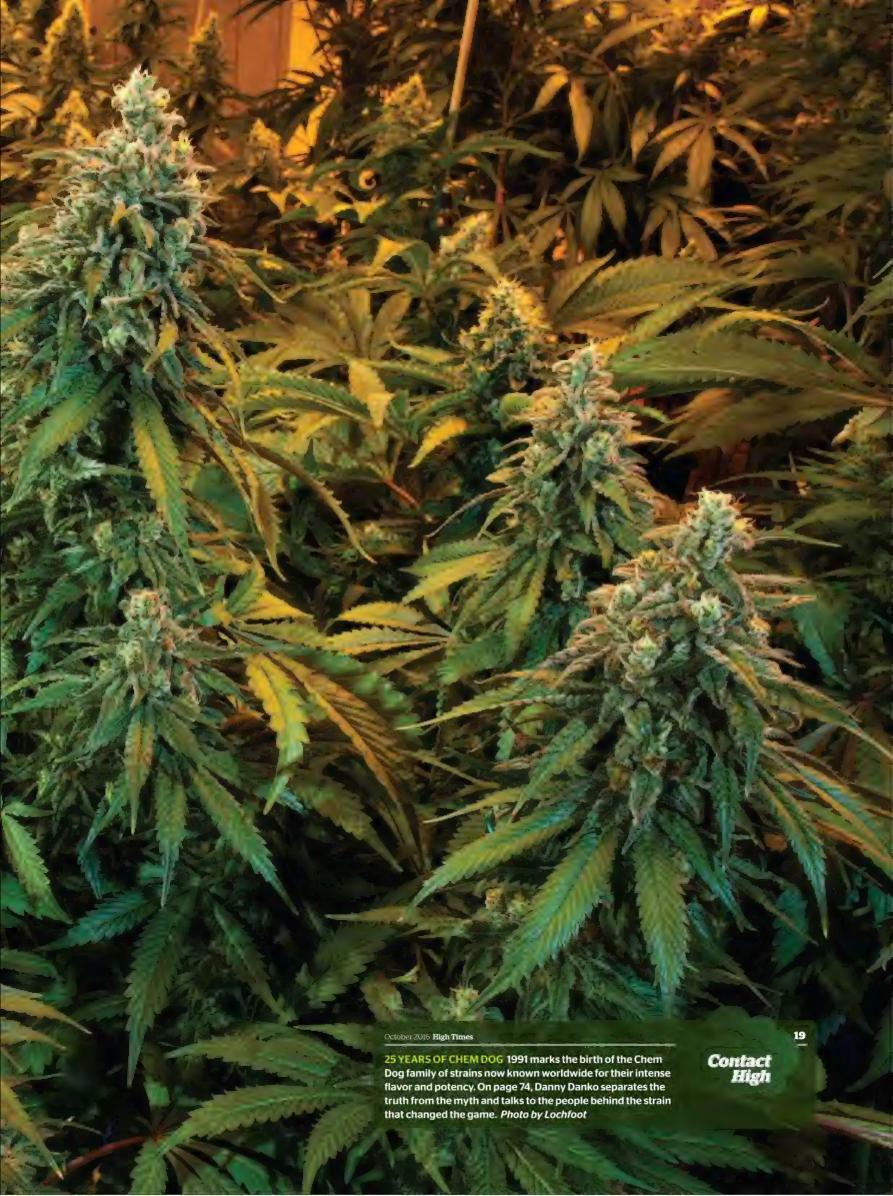
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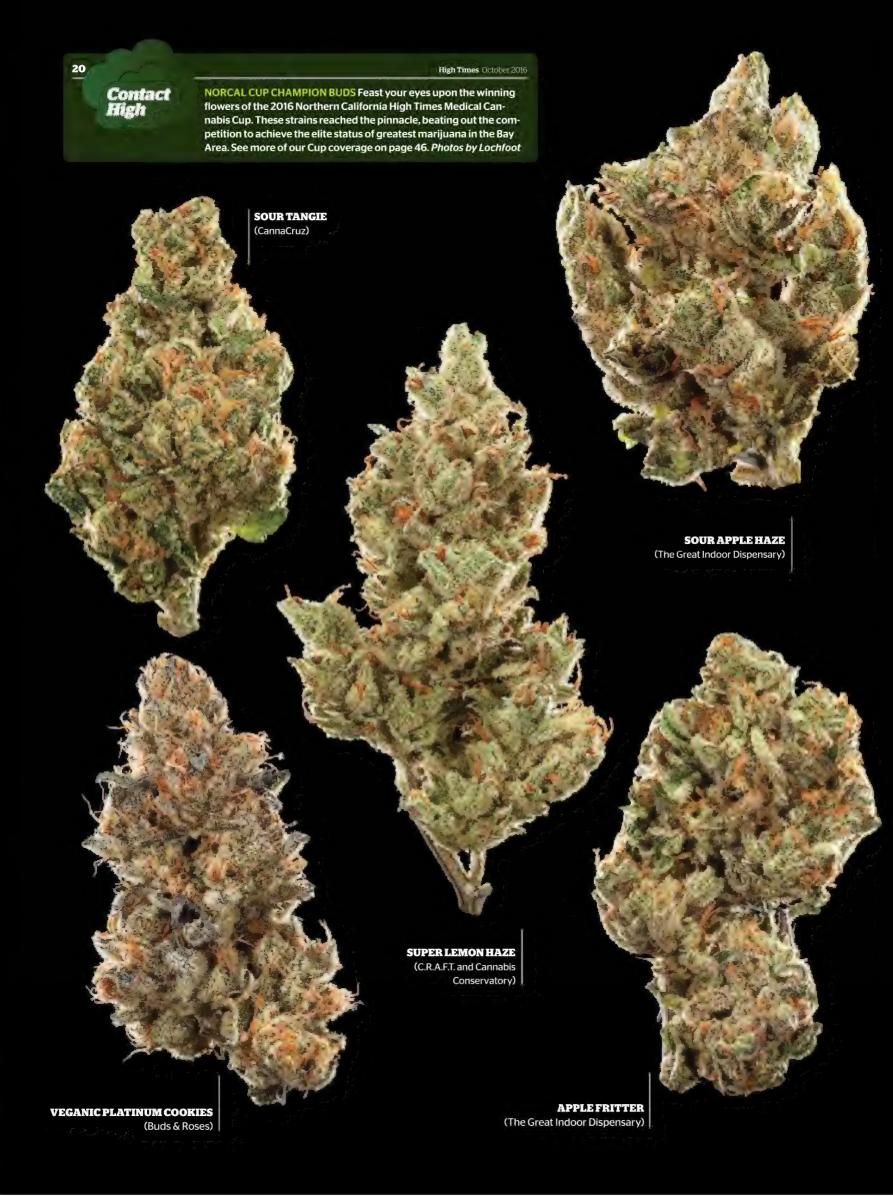
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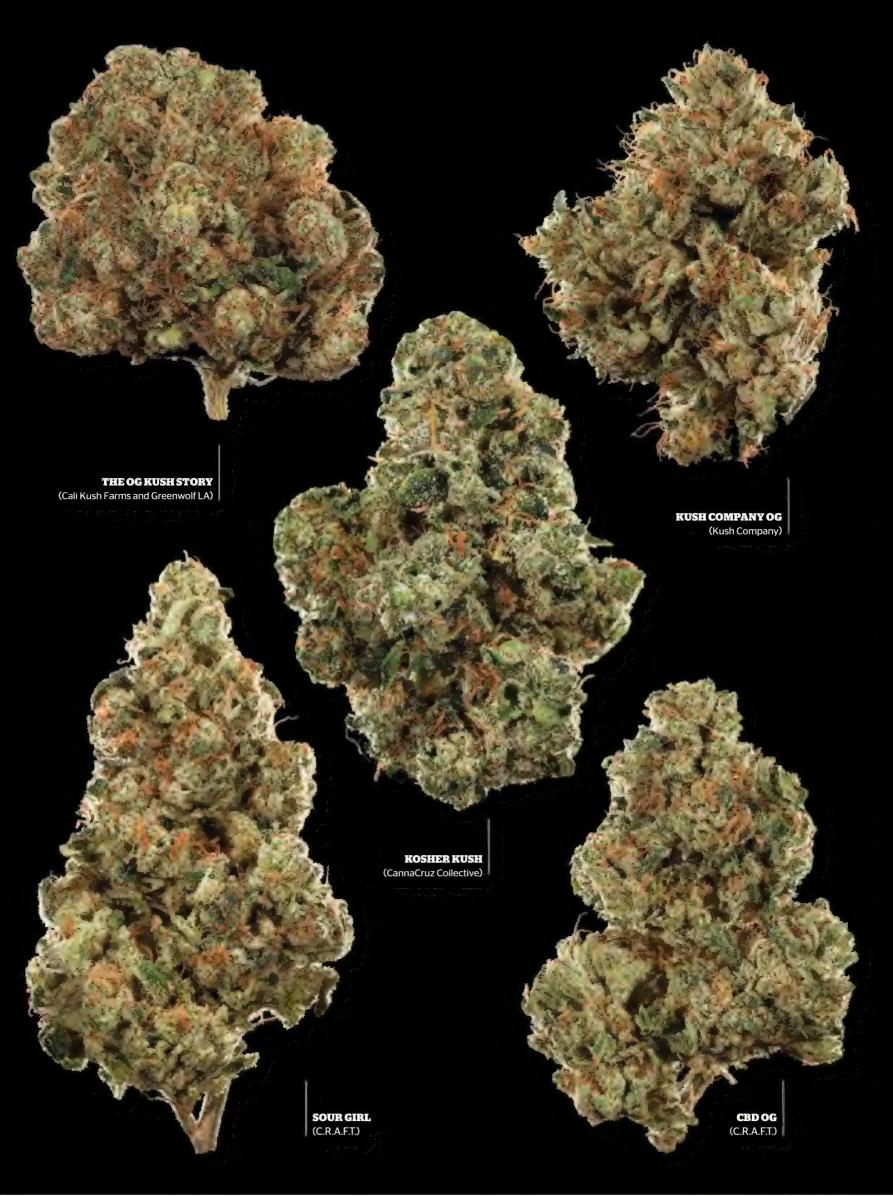
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Entertainment

Dan Soder Comedian and cannabis lover raps with HT about legal weed. p.34



A closer look at some of the anti-cannabis crusaders attempting to derail pot's progress. By Mike Hughes

Marijuana-law reform has been on a roll.

Four states and the District of Columbia have approved recreational cannabis, 25 states and DC have legalized medical marijuana, and polling indicates that a majority of Americans favor legalizing pot. Despite the good vibes, however, it's important to remember that there are still many hardline anti-pot crusaders out there, and they're not going away anytime soon. For every Melinda Haag or Michele Leonhart that fades away, another misinformed or disingenuous stooge is waiting to take their place. Below is a list of eight particularly hateful pot prohibitionists who should be on your radar.



CARLA LOWE: As a substitute teacher in the 1970s, Lowe noticed that some of her students "with long hair... weren't focusing" on their lessons and decided "they were probably

smoking pot." Since then, she's made it her life's mission to fight against dealing with marijuana rationally. In 2010, Lowe founded Citizens Against Legalizing Marijuana (CALM) in response to California's legalization effort, Proposition 19. Now, six years later, Lowe and CALM are at it again, spreading prohibitionist propaganda in hopes of sinking California's current legalization effort, the Adult Use of Marijuana Act. CALM erroneously reports that marijuana causes permanent brain damage, testicular cancer, mental illness and birth defects—and, of course, has no medicinal value.



JAMES LANKFORD:

In 2014, the Justice Department issued a memorandum granting permission to Native American tribes to grow and sell marijuana on their lands. This didn't sit well with

Oklahoma Senator James Lankford, who proposed a bill that would punish tribes growing or selling pot by stripping their federal funding. According to Lankford, the bill-which seeks to fuck Native people out of a sustainable and potentially lucrative revenue source—is necessary because "The Native American community experiences the highest drug-induced death rate in the country." See? Lankford is just protecting indigenous people from pot. He even refers to his bill-the Keeping Out Illegal Drugs Act—by the cloying and shameless acronym "the KIDs Act."



ing bag of Southern poo Nancy Grace amps up her unique brand of faux moral outrage

NANCY GRACE: Shriek-

when discussing marijuana on her eponymous HLN talk show. Grace is an opportunis-

tic ratings whore who cherry-picks stories of terrible crimes involving pot and holds them up to her gullible audience as being representative of marijuana use as a whole. And if a guest is brave enough to disagree with her, Grace will indignantly squawk "You're stoned!" at them. But perhaps we've seen the last of Grace for a while, since the network just announced

that her show, mercifully, will be ending in October.

KEVIN SABET: No list of prohibitionists



would be complete without Kevin Sabet. The co-founder of Project SAM (Smart Approaches to Marijuana) has been incredibly successful at gaming the media, which is famously

obsessed with point/counterpoint "reporting," into airing his marijuana misinformation. Sabet often goes on television to assert that cannabis "significantly decreases IQ," "is 10 times more dangerous than the marijuana of the '60s," and "addicts one out of every six children who ever try the drug." All lies—but Sabet wears a suit and speaks authoritatively, so idiots believe him. And media outlets keep inviting him back.

CHUCK ROSENBERG: Last year, national



embarrassment Michele Leonhart was forced out as head of the DEA. Leonhart once famously refused to acknowledge that heroin is any worse than marijuana when questioned before

Congress. So it seemed reasonable to hope that her replacement would be an improvement... Enter new DEA chief Chuck Rosenberg, who appeared eager to display the ignorance that earns you the top job at the DEA when he went on the record saying, "What really bothers

me is the notion that marijuana is also medicinal—because it's not... We can have an intellectually honest debate about whether we should legalize something that is bad and dangerous, but don't call it medicine—that is a joke."

SCOTT PRUITT: Colorado voters passed



Amendment 64 in 2012, legalizing recreational pot. Governor John Hickenlooper decided not to block the will of the people, and the federal government opted not to interfere with the state's consti-

tutional amendment. But this isn't really about the citizens of Colorado—it's about Scott Pruitt, the prohibitionist attorney general in the nearby state of Oklahoma. Pruitt, along with the AG of Nebraska, another neighboring state, filed a lawsuit asking the feds to overturn Colorado's historic law and make cannabis illegal again. Although the Supreme Court recently refused to consider the suit, Pruitt won't quit: He's now attempting to join a case opposing legal pot in a Denver-based appeals court.

"I just don't think we should legalize more mindaltering substances if we want to make it less likely that people travel down the path toward using drugs... There is a huge heroin epidemic."

-Debbie Wasserman Schultz

DEBBIE WASSERMAN SCHULTZ: True.



the Florida congresswoman hasn't devoted her life to thwarting marijuana-law reform—but while much of her party favors legalizing pot, Wasserman Schultz opposes even medical

marijuana. "I just don't think we should legalize more mind-altering substances if we want to make it less likely that people travel down the path toward using drugs," she opined in a recent interview, adding: "There is a huge heroin epidemic." That's right, the current chair of the Democratic National Committee subscribes to the thoroughly debunked gateway theory, implying that medical pot will somehow encourage people to use heroin. Please, Debbie—if you're not going to lead, kindly get out of the way.

JEFF SESSIONS: Apparently, old drug



warriors don't change; they just double down. But while their position on pot is at odds with a country that increasingly favors legal weed, at least the US Senate provides a platform

for them to rage against the dying of the light. At a recent masturbatory hearing on the Justice Department's handling of marijuana legalization, Alabama Senator Jeff Sessions got a chance to dust off some vintage '80s anti-pot rhetoric, bemoaning the fact that legalizing weed would "reverse the progress that we've made... trying to send that message with clarity, that good people don't smoke marijuana." Perhaps it's time voters send Jeff Sessions the message that his services are no longer required. **

HIGH FIVE

Hemp Miracles

Industrial hemp is generating a brave new world of eco-friendly products. By Mark Miller



Cannabis Car

Bruce Dietzen of Renew Sports Cars in Key West, FL unveiled a vehicle crafted from a Mazda chassis and 100 pounds of imported Chinese hemp. Hurds, hemp's woody core fiber, bind with resin to create a material superior to fiberglass. Renew's roadsters range in price from \$40,000 for a 130-horsepower model to nearly \$200,000 for a 640-hp beast.



Hemp Refining

PureHemp, based in Colorado, has developed a process for refining industrial hemp into oils and pulp as well as lignin, the "glue" protecting fibers. PureHemp's proprietary tech ensures more rapid recovery of valued sugar streams from hemp biomass. The company plans to open its first commercial hemp refinery toward the end of this year.



Improving Fibers

Louisville, KY-based Sunstrand is the only company developing commercially viable surface treatments for natural hemp fibers. These customized coatings allow the fibers and resin systems to better bond with plastic materials, providing a superior composite response. Sunstrand was founded in 2014, the year Kentucky first legalized hemp production. The state is slated to grow 4,500 acres in 2016.



Hemp "Hair" Craft

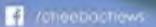
Canadian Derek Kesek, the founder of Hempearth, is building the world's first hemp aircraft, which is scheduled to make its historic inaugural flight sometime in 2016. Kesek's hemp plane promises to be lighter, stronger and more ecologically sustainable than its competitors, with the hemp-fiber hairs and their astonishing reinforced polymers replacing fiberglass in the construction.

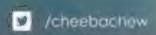


Nano-Hemp

Hemp fiber can be used to produce cellulose nano-crystals, which are superior and cheaper than graphene. Nano-hemp's endless possibilities include everything from new drug-delivery technology to improving water purification. At present, only Canada engages in nano-crystal commercialization. Montreal's CelluForce will eventually produce a ton of nano-hemp crystals daily.







ADVENTURE ISWORTHWHILE



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Inside the Wide World of Weed

Can Fish Case Pass the Smell Test?

We all know that cops lie, but how much deception should they be allowed to get away with? That question could be answered by a case involving a shipment of salmon stuffed with marijuana sent from California to Louisiana several years ago.

On November 9, 2012, Baton Rouge police tracked a package they suspected of containing pot to the home of Jacson Moore. Instead of securing a search warrant, however, the narcs staked out Moore's home until he emerged carrying a cooler and drove off.

The police eventually stopped Moore's car, told him they were investigating an armed robbery, and asked if they could perform a search. Moore consented, and the search resulted in the discovery of the salmon, which contained six pounds of pot.

Because the cops lied about the reason for the search, Moore's attorney convinced a judge to throw out the resulting evidence. However, that decision was reversed on appeal. Now Moore's lawyers plan to take the case to the Supreme Court, providing the highest court in the land with an opportunity to decide what constitutes an unreasonable invasion of privacy.

Bungling Bud Burglars

A trio of dolts in Durango, Colorado, identified themselves as DEA agents and proceeded to rob a legal home cannabis grow. The burglary's mastermind, Lorne Carl Heintze, and two accomplices handcuffed the occupants of the home, placed pillowcases over their heads, and stole eight pounds of pot worth \$18,000.

One of the victims managed to free herself and call the police. She told them that Heintze—who happens to be her nephew—was likely behind the heist, since he'd helped her set up the grow.

Incredibly, Heintze, who came armed with pepper spray, was so inept that he accidentally sprayed himself in the face and had to abandon the robbery. His accomplices convinced him to steal the buds from his aunt to save one of them from getting into trouble with the person requesting the cannabis.

All three were arrested on firstdegree-burglary charges, and Heintze was also charged with impersonating a law-enforcement officer. MS WEED



Microsoft will be the first major company to start working in the cannabis industry. The tech giant announced that it would make the leap into legal pot by partnering with LA-based Kind Financial on Agrisoft, a cannabiscompliance software program that tracks plants from seed to sale.

Such tracking is already mandatory in Colorado and could be the centerpiece of legislation in several other states that are looking to legalize pot, as it helps to ensure that cannabis is legally cultivated, distributed, and sold rather than diverted to the black market.

The Agrisoft program has been available for the last three years and provides potlegal states with the technology necessary to monitor cannabusinesses on a wide scale. Although the company doesn't have any government contracts currently in place, Kind Financial is no doubt hopeful that its partnership with one of the biggest names in the tech world will soon change that.



Snoop and Hockey Team Face Off

In a strange turn of events, a National Hockey League franchise is battling Snoop Dogg over the trademark for his marijuana product line. The Toronto Maple Leafs have taken issue with Snoop's logo, which features the words "Leafs by Snoop" written over a gold leaf with seven points. (For purposes of comparison, the Maple Leafs' logo is blue and white and features a leaf with five points.)

The team's parent company, Maple Leaf Sports & Entertainment, filed an opposition to Snoop's logo with the US Trademark and Patent Office. However, MLSE had to request additional time to define its opposition.

According to intellectual-property-law professor Christopher Sprigman, the Maple Leafs could argue that "their brand has been tarnished by confusion over Snoop's new logo," or that their logo should be protected because of its fame and recognizability. However, Sprigman believes these arguments will be difficult to prove in court.



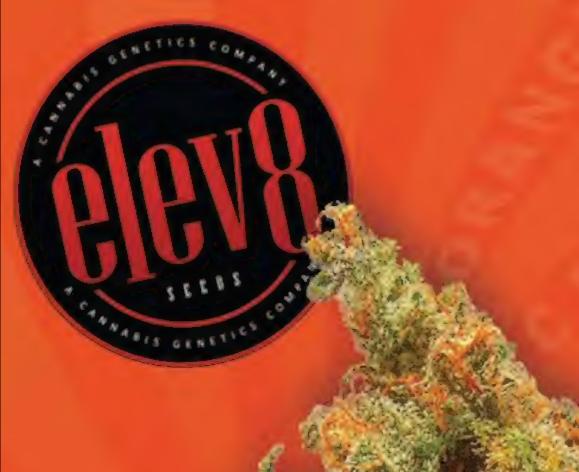
Absolute Vindication

The war on cannabis concentrates continues in California, as DEA agents and local law enforcement raided properties owned by Care By Design, which produces cannabis oils, tinctures and sprays under the AbsoluteXtracts brand.

The enormous coordinated effort involved more than 100 officers, including Santa Rosa police and Sonoma County sheriffs, who raided five properties associated with the company. Several people were arrested and equipment and payroll records seized.

It appears that authorities suspected Care By Design of illegally manufacturing concentrates through butane extraction, based on a tip by a disgruntled former employee. However, Nick Caston, a Care By Design spokesman, told reporters that the company uses CO_2 rather than butane for its extractions.

Dennis Hunter, 43, a founding patient-member of Care By Design, was released without charges soon after his arrest in the wake of a public protest outside the Sonoma County courthouse. Care By Design has resumed making medicine (legally) and pledges to make adjustments to meet the local industrial code—the only legit violations uncovered in the raids.



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Colorado Teen Pot Use Below Average

Despite the prohibitionist hysteria over legal pot, the sky still hasn't fallen after four years of recreational marijuana in Colorado. In fact, even the old canard that legal weed will increase underage pot use is on the ropes, as the latest study shows that current use among Colorado's teens is actually lower than the national average.

The Colorado Department of Public Health's biannual Healthy Kids Colorado Survey reports that nearly four out of five high-school students don't use cannabis at all. Only 21 percent reported smoking pot at least once within a 30-day period in 2015. That number is actually down 1 percent from prelegalization use in 2011, and four points lower than the pot use among Colorado's teens in 2009.

These latest findings also debunk a December federal study claiming that Colorado has the highest teen pot use in the country.

Free at Last

After 12 years in federal prison, Weldon Angelos is a free man. Now 36, he received a 55-year sentence in 2004 for selling pot to a confidential informant on two occasions. Although it was his first drug offense, Angelos fell victim to mandatory-minimum sentencing because he was allegedly in possession of a handgun during the deals. Mandatory-minimum laws require judges to impose incredibly harsh prison terms on offenders regardless of the extenuating circumstances.

Judge Paul Cassell was deeply disturbed by the draconian sentence he was forced to impose and never stopped advocating for Angelos. In February, Cassell wrote a letter to President Obama asking for his release. While Angelos wasn't among the 42 prisoners whose sentences were commuted by Obama in June, he believes that Cassell's steadfast support was responsible for the federal court's decision to grant an immediate reduction in his sentence and set him free.

Angelos has since returned home to Utah and reunited with his three children.

STONER BONER

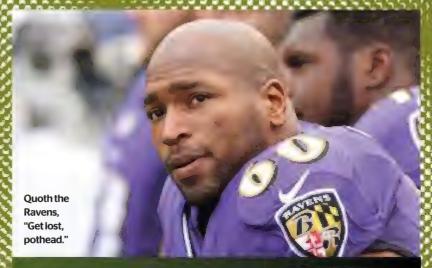


While many swear by pot's power as an aphrodisiac and sexual enhancer, pop star Nick Jonas recently revealed that cannabis's amorous side effects can, um, arise at inopportune moments.

During an appearance on The Tonight Show, Jonas disclosed to host Jimmy Fallon that, a day after sampling a friend's medicinal lollipop, the singer experienced what he described as a "NARB" (noapparent-reason boner) while appearing at the Young Hollywood Awards back in

Fallon displayed still images from that rather stiff appearance, which showed Jonas uncomfortably holding his hands directly over his groin, both on the red carpet and even when presenting an award onstage. Jonas also playfully recreated his "coverup" for Fallon.

It's a good reminder to always use caution with edibles: Sometimes the effects are beyond your control.



Raven Released

In March, Eugene Monroe became the first active player to advocate for medical marijuana in the National Football League. Monroe argued that cannabis is a safer alternative for treating pain than addictive opioids, which he says are overprescribed to players. The veteran offensive lineman even announced that he would donate \$80,000 to medical pot research.

It was a brave stance for Monroe to take, since it undoubtedly pissed off the league. And in June, the Baltimore Ravens, predictably, released him.

The Ravens insist that Monroe's injuries were the cause. According to head coach John Harbaugh, the decision was "100 percent football circumstances."

After learning of his release, Monroe said in a statement: "I will never stop pushing for the League to accept medical cannabis as a viable option for pain management... I will do everything I can to ensure the generations of NFL players after me won't have to resort to harmful and addictive opioids as their only option."

Duterte Harry

Rodrigo Duterte, the unhinged, 71-year-old president-elect of the Philippines, will personally murder you for using drugs. And that was basically his campaign slogan. Duterte cruised to an easy victory in May's election on the strength of his record—he acknowledges working with a death squad that summarily executed 1,000 suspected drug users in the city of Davao—and explicit campaign promises—he pledged to continue killing drug users and to dump their bodies in Manila Bay.

In the lead up to the election, Duterte told the Davao The Philip-Sun Star, "If by chance that God will place me there pines' new [the presidency], watch out because the 1,000 president is [people executed] will become 100,000. You will see a murderous lunatic. the fish in Manila Bay getting fat. That is where I will dump you." Unfortunately, it doesn't seem that was an empty campaign promise. After being sworn in as president Duterte told a crowd, "These sons of whores are destroying our children. I warn you, don't go into that, even if you're a policeman, because I will really kill you. If you know any addicts, go ahead and kill them vourself."













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30 High Style



An Artistic Atmosphere

Brendan Hill, best known as the drummer for Blues Traveler, also co-owns a retail cannabis store in Washington State. He gives us a look inside Paper & Leaf's first year in business.

My business partner Steve Kessler and I joke that a day in the cannabis industry is like a year in any other profession. Keeping up with the constantly evolving state regulations is a full-time job in itself. Add to that educating your staff on the changing protocols, maintaining the legally required level of security, ensuring that the bank won't reject your funds, and juggling the monthly skyhigh tax payments—all with the knowledge that the Feds may decide at any moment to shut it all down.

When Steve and I met back in 2013, we had no idea what we were getting into.

Flash-forward two years—including a lottery for licenses, a plethora of public debate and City Council meetings, and a lot of time, energy, hard work and personal

funds invested, and we finally opened the doors of Paper & Leaf on Washington State's Bainbridge Island in June of 2015.

With Paper & Leaf, Steve and I wanted to create something special. Given that our shop was situated in an empty warehouse in an industrial business park—one of the few options available due to state regulations—we set out to develop the artistic atmosphere we're now known for. Leveraging our combined backgrounds in music and film, our aim was to do away with the stereotypical dispensary model and create a space that felt more like a gallery. Paper & Leaf was to be accessible and comfortable for everyone from the experienced cannabis smoker to the curious first-timer. The result was, and continues to be, a unique experience, from

the ambiance of the vintage records we play and the artwork on the walls, to the friendly staff giving guided tours and the inviting product-display boxes throughout.

Getting the shop up and running has been more exhausting than we ever foresaw, but the feedback has been wonderful—and that's what makes it all worthwhile.

The competition in our budding market is tough, but we learned early on that if we wanted to stand out, excellent customer service was key. We host regular Cannabis 101 classes, have shows by local artists, and even purchased a shuttle to escort patrons from the Bainbridge Island ferry to the shop—and then anywhere else on the island. Seeing the diversity of the customers who walk through our doors every day lets us know we're doing something right—not only for our business, but for the industry as a whole.

The coming year will be another ambitious chapter. With the merging of the medical and recreational markets, as determined by Washington State, we'll be able to fully serve our medical patients with additional products, stronger dosage levels and reduced taxes. However, this melding of markets will not be without its own trials and tribulations. It will likely be another year of evolving rules and regulations that we'll need to stay on top of, but it's up to all of us in this industry to continue changing the stigma that decades of pot prohibition have created—and to provide the best possible cannabis while we're at it.



SPOTLIGHT

Titan 2

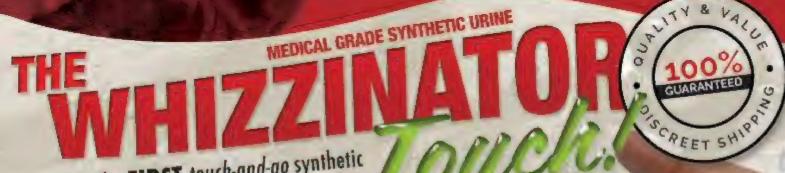
This sleek vape case from Hydra Vapor Tech is a stylish way to bring your Pax 2 along wherever you go. The Titan 2 is odor-proof, compact and resilient, with all the features you'll need: a treasure chest for flowers, a stirring tool, and a snug compartment designed specifically for the Pax 2 with a silicone mouthpiece cap. Load up your vape, pop it into the chamber, and slide it closed for a secure and elegant way to carry your weed. The Titan 2 comes in four classic colors: aluminum, black, white or gold. \$39.95, hydravaportech.com



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32 High Buys
High Times October 2016

Top 10 Stoner Fashion Brands

When it comes to marijuana, you think of feeling good—but what about looking good, too? From space-weed sweatshirts to high-end vegan threads and cozy hemp tees, here are 10 awesome brands for the fashionable stoner. And yes, there will be tie-dye. *By Sophie Saint Thomas*

1) Helpsy: Featuring Golden Girls sweatshirts, Mary Jane-printed body suits and vegan-leather hologram backpacks as heady as a bowl of Death Star, Helpsy creates ethical, cruelty-free, locally sourced clothing that is just as on-trend as it is good for karma points. shophelpsy.com

2) The Personal Stash:

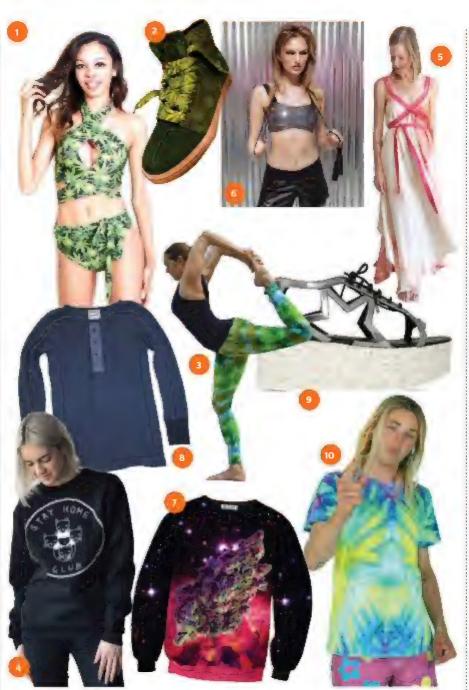
It wouldn't be a stoner fashion list without the Personal Stash, creators of the "I Bud You" logo, which was founded by artists in New York City who might even love pot more than you do. (Kidding!) Check out their weed-themed shoelaces. available in "strains" like NYC Diesel and Granddaddy Purp-and after skateboarding with Diesel running through your brain and your shoes, crash on their dope bedding when it's time for a weed nap. ibudyou.com

3) Wildflower Dyes:

I know the cannabis industry is getting a legalized makeover and all, but let's be real: Every stoner needs some tie-dye. Launched by a beautiful yogi in Victoria, Canada, Wildflower Dyes should be your go-to source for hand-dyed yoga pants, bedsheets—even knee-high socks. wildflowerdyes.com

4) Stay Home Club:

Parties get a lot of hype, but what's arguably the number-one best thing about weed? Getting



high to stay in! If you're more of a Netflix-and-chill than DJs-and-pills type, then the Stay Home Club's comfy tees and sweatshirts are for you. These self-proclaimed purveyors of "Design for the Disgruntled" have been operating out of Montreal since 2012 and offer the perfect outfits for looking cute while couchlocked. stayhomeclub.com

5) Willow Knows:

You'll feel as magical as a pretty glass pipe in Willow Knows, a line of silk textiles for body and home. Each piece is individually handdyed, embracing any imperfections in the process. willowknows com

6) SukiShufu: From shiny black dominatrix-style pieces for the

kinky stoner to cloudprinted yoga pants for your angelic side, the London-based SukiShufu creates classy active wear. Recent studies have shown that despite their propensity for the munchies, cannabis users are slimmer than most—which makes this innovative sportswear perfect for your next ganja yoga class! sukishufu.com

7) Revolution Riche:

If your love of getting high and contemplating the existence of aliens made a baby with your love of getting high and sending your friends internet memes, it would look like a Revolution Riche sweatshirt. Talk about a Thunderfuck! revolutionriche.com

8) Jungmaven: The creators of Jungmaven have been working with hemp textiles for over two decades, and they strive to fight climate change through their laidback garments, which use the most environmentally friendly industrial fabric on the planet. Plus their classic and cozy T-shirts come in every color of the rainbow. jungmaven.com

9) Stella McCartney: We had to put at least one celebrity designer on our list. While many of us would rather spend our hard-earned cash on greenery than \$12,000 shoes, Stella McCartney is the hippie of high fashion for her utilization of vegan materials and sustainable production methods. stellamccartney.com

10) Mowgli Surf: What's a stoner without a pair of sweatpants? Mowgli Surf creates American-made, hand-dyed, surfer-chic clothing to pair with your Maui Wowie and wear on your next adventure, no matter how far away the nearest beach may be. mowglisurf.com **



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High on Fun

Standup comic and marijuana aficionado Dan Soder chats with *HT* about legalized weed in his home state, being a "mental Sherpa" and his new Comedy Central special, *Not Special. By Katie Compa*



Dan Soder's first memorable experience with pot was at a house party in high school. "It was the first time I'd ever seen 'kind bud,' with no seeds or sticks," he recalls, lounging on a leather couch in the *High Times* office. "It was my second time smoking pot, and I was ... 15? I was *so* stoned. I've been chasing that for a *long* time. Yeah, that was a lot of fun."

Fun has been Soder's guiding principle this year. Comedy Central recently premiered his hour-long special, *Not Special*, taped at Philadelphia's Trocadero Theatre. "It was awesome, man," Soder says. "Philly was an audience

"If I wasn't smoking weed, I'd be taking Zoloft or some bullshit."

where I was like, 'Man, I think they just kinda get it.' I don't give a shit about editing; I don't give a shit about promotion. As a comic, being onstage having fun is the key element—then *I* win."

Soder grew up in Aurora, CO, and spent part of each year in San Francisco. These days, Colorado has legal weed, but as Soder notes wryly, "Getting legal weed when you no longer live in a state—it's the same as when I went to college, and my mom bought a new TV and got a new carpet in the living room. 'Hey, Mom, fuck you—you could've done this when I was here!"

Still, notwithstanding Carpetgate, Soder's mom is a hip, hip lady: "I could smoke openly from the time I was 16," he says. And when he visits Aurora these days, Soder enjoys staying with his mom. "Right when I get home, my mom's like, 'Wanna go to the dispensary?' She keeps my weed in the freezer! I'm like, 'I forget, 'cause I'm so high, how great of a mom you are.'"

Ask him about legal weed's future, however, and Soder's vision is less rosy. "We're so fucked," he predicts. "It's gonna go Wal-Mart, it's gonna go Starbucks. Big business is gonna get involved, and these motherfuckers are gonna try to make a profit. Enjoy it now."

As for his favorite strain, Soder prefers Golden Goat, a *sativa*-dominant hybrid with a happy high. "I like *sativa*-heavy weed. One of my favorite things to do is smoke weed, have a cup of coffee, listen to music"—he offers the Black Angels' *Passover* as "a great album to get uncomfortably high to"—"and then try to write anything: my standup, a script I'm working on... I love a *sativa* to get my brain going."

Soder says he doesn't drink, but "I'm going to get fucked up *some* way. If I wasn't smoking weed, I'd be taking Zoloft or some bullshit. If you walk around sober, you're a mental Sherpa. I need help, so I smoke weed... or take mushrooms. Which is kind of the best, until it *isn't* the best, and then it's the worst—and then it's the best again!"

So if you're ready for a good laugh, find yourself a nice *sativa*, a cup of coffee and *Not Special* on Comedy Central. And if you prefer your comedians in a dramatic setting, Soder is also a regular on HBO's Wall Street drama *Billions*.



From Eyesore to Drugstore

In Soder's hometown of Aurora, CO, a former McDonald's has reopened as a dispensary. "The entrance is through the gift shop, which used to be the children's play area," Soder says. Sadly, "You can't pick up two prerolls at the drive-thru."



36 Entertainment High Times October 2016



Death Metal Dare

The Black Dahlia Murder vocalist Trevor Strnad used to be anti-weed. Then he got high on the road. By J. Bennett

"I like my bowls and bongs streamlined—I like them to look like the Pyrex beakers from science class. I don't want any skulls or swirly-ass hippie shit."

The speaker is Trevor Strnad, vocalist for Michigan death-metal maestros the Black Dahlia Murder. You might recognize his name from the articles he contributed to hightimes.com last year, in which he discussed his favorite strains and weed cities and that one time he smoked out of an apple with famed "Goat Boy" comedian Jim Breuer. Not surprisingly, Strnad's journalistic forays have paid off in copious greenery. "The volume of weed that we're being given by people at shows—which was already really good—has increased even more since the articles," he enthuses. "So it's raising awareness, which is great for us."

When we catch up with Strnad, he's enjoying a couple of weeks off between tours in support of the Black Dahlia Murder's seventh album, Abysmal. In his downtime, he's been exploring the medicinal cornucopia at Green River Meds, his local dispensary in Detroit. "I've been loving the Cheese lately," he says of the uniquely cheddar-flavored strain. "I've been getting that one from the dispensary, and it just hammers me. My girlfriend is afraid of it—we go into that Claymation dimension. The Cheese is definitely not good for public speaking."

Though he's an aficionado of both *indicas* and *sativas*—his favorite strains include Cherry Pie, Fire OG, Double Blue Dream and (of course) the Black Dahlia—Strnad didn't start smoking until he was 22. "I was vehemently against weed and drugs in

general for a long time, actually," he explains. "I think that came from my parents, who were ragers. You have to go against whatever your parents are doing—so when the DARE officer came and talked at our school, it really registered with me, because my parents were drinking and doing drugs and being maniacs. So it's kind of amazing that I'm an insane pothead now."

Strnad busted his weed cherry in the Black Dahlia Murder's trailer while on tour in Texas in 2004. "I was a good amount of beers deep, and I said, 'Guys, I want you to take me to the trailer,'"

"I was vehemently against weed and drugs in general for a long time, actually."

e recalls. "And they knew exactly what that meant; hey kind of anticipated that

was gonna happen. They ere like, 'When he asks

bout weed, don't make a big eal out of it. Let's just get it

side of him first.'
"Because it was after I'd
ad a couple beers, I def-

itely got the spins,"

rnad continues. "It totally icked, but I said, 'Guys,

on't worry—I'll try it again morrow!'"

We all know that weed is to music like ice cream is to pie, but Strnad says this time-honored tradition goes double for death metal. "I like to get stoned and listen to some crazy-ass death metal and just try to follow the riffs. It brings out the minutiae. With death metal, I think that's important, because most people just think of it as static or as really tiring to the ear. But for me, it's like an escape."

Though most of his bandmates partake, Strnad says he and guitarist Brian Eschbach are the only "24-hour smokers" in the Black Dahlia Murder. "Brian is probably a bigger stoner than I am," he adds with a laugh. "He'll smoke a 20-foot bong rip and walk directly onstage for a show. I guarantee that everything he's ever written for the band, he's been stoned. There's no doubt in my mind." **



Parental Party Units

Strnad's relationship with his hard-partying parents has come full circle. "I've smoked weed with both my parents now," he concedes. "I made my mom do a gravity bong on my birthday a couple years back. She got wrecked."

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38 Entertainment High Times October 2016



Alone in a Crowd

Singer-composer Ramona Gonzalez reveals her desire to connect in a disconnected world.

IT WOULD BE a shame if Nite Jewel's overarching theme of disconnectedness on Liquid Cool, her first new album since 2012's critically acclaimed One Second of Love, threw potential fans off track. One Second's idiosyncratic twists and turns around the margins of dance-pop and electronic music revealed the LA-based singer-composer, a.k.a. Ramona Gonzalez, to be a slyly gleeful pileron of sonic oddness who enjoyed daring the world to hear something very new on her own very personal terms. Four years on, Gonzalez is stripping life way, way down, as if to reveal herself-if only to herself.

Liquid Cool plumbs the threat of getting real lost in the crowds on a frighteningly fragmented globe



Nite Jewel Liquid Cool (Gloriette)

and-crucially for her music's considerable emotional wallop—thrashing the whirlpool down into permanent detachment. Gonzalez gives her selfproduced and self-performed songs a woozy, wistful opulence of undulating multi-synths and starkly unadorned beats, as if to sonically comment on the EZto-digest canned product that our pop music has become—as

well as how we tend to mold ourselves to our social and technological milieus.

While songs like the dance-away-the-heartache "Boo Hoo" indicate that she's at least got a kind of humorous perspective on the subject, the album is more often bare-bones and coolly considered in its quiet-fire ballads and silken funk-pop ("Over the Weekend," "Kiss the Screen," the Bryan Ferryish yearn of "Running Out of Time"), whose deliberate delicacies glow with Gonzalez's palpable desire to communicate and connect. That desire, implied or stated outright, pays off big time, infusing her songs with a seductive, touching intricacy. John Payne

MUSIC RECOMMENDATIONS



You Will Never Be One of Us (Nuclear Blast)

Dive-bombing from the smog-choked suburbs of LA into your shredded speakers, You Will Never Be One of Us is rammed to the gills with more vitriol, venom and hammer-smash riffing than its 23-minute running time should be able to contain. Grind-crushers Nails shed a guitarist since

Zig Zags' moniker carries the promise of stoner rock (and, literally, roll), with the trio sprinkling punk fury onto their musical joints, as in the alienabduction ode "They Came for Us." Caleb Miller's bass is the Gorilla Glue cementing the album's strongest track, "Lizard." And "My Lighter"

their last album, 2013's acclaimed Abandon All Life, but they haven't lost a single step: Vocalist/guitarist Todd Jones and his thunderous rhythm section have cranked out their most savage, visceral album yet. Short, sharp and severe, this is the hardcore/death metal/grindcore album of 2016. J. Bennett

is guitarist/vocalist Jed Maheu's warning to anyone trying to flick his Bic. The LP concludes with a scary pair, "Afraid of the Dark" and "Night of the Knife," leaving the listener to either fill those rolling papers with comedown Kush or get crazier with some steaming Trainwreck. Mark Miller



Zig Zags

Red

Running Out of

(Castle Face Records)

Fracture. Repair. Repeat. (Metropolis Records)

In Letter Form graft the UK angst of Bauhaus and New Order onto San Francisco cynicism, as opener "Face in the Crowd" establishes the band's template of graveyard guitar and desolated vocals. Take a deep drag of "High Line" and it's 1982 again, while "Wait Now" is ILF at their

most accessible, even as the band maintains its demeanor of frosty denial. And it could be drugs, shock therapy or raw despair informing "Edison's Medicine." The brief but arresting ambiance of closer "Mal de Mer" vouches for the ILF aesthetic of casting aside fleeting contentment to caress the unfathomable. Mark Miller

BOOKS RECOMMENDATIONS



Rebirth of the Cool Robert James Campbell(powerHouse)

Archivist Jessica Ferber has curated the work of a forgotten photojournalist, Robert James Campbell. The result is this collaboration by two creatives who never met: Campbell died in 2002. Ferber later discovered his black-and-white shots of jazz and folk musicians in Greenwich Village in the

1950s and '60s that capture the joy of music-making. Campbell documented the social scene surrounding the players, one that fell on the cusp 'twixt Beat and hippie. These images celebrate the unslick moments in life that aren't owned by a corporation, but emerge from the human heart. Michael Simmons



How to Run a **Drug Cartel**

Wainwright(PublicAffairs)

As the Mexico correspondent for The Economist in 2010, Tom Wainwright came to realize that the country's drug cartels functioned much like multinational corporations. Focusing on the economics of both the drug trade and the Drug War, Wainwright discusses the futility of prohibition in

terms of financial incentives and opportunity costs. This book provides more ammunition to the growing call for a drastic change in the way that governments deal with all drugs. Wainwright's conclusion is that the only solution is legalization, along with enlightened regulation and oversight. Ben Hall

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ity	State	Zip

Making Our Mark In the World of Weed

Ganjapreneurs may have a great product to sell and many enthusiastic customers, but they still have difficulty establishing a trademark. That's about to change.



Trademarks establish trust.

ver wonder why marijuana trademarks are not registered? The United States Patent and Trademark Office (USPTO) has held that a trademark applicant must show that the goods or services under consideration are lawful. But since marijuana remains a Schedule I drug, it is still as unlawful at the federal level as say, heroin or bath salts.

As a result, honest cannabusinesses—although legal at the state level—are stymied when they try to make a name for themselves, so to speak. Customers lose out too, because they cannot be assured that a trusted name is really trusted without the imprimatur of national trademark registration.

Soon, however, we expect to see some needed changes in how marijuana trademarks are treated, and we have High Times's own legal mavens to thank for lancing this boil of injustice. You're welcome.

In May, attorney Kieran Doyle of Cowan, Liebowitz & Latman, P.C., argued our position before USPTO to maintain a trademark application for Cannabis Cup products. Having explicitly set forth that the marijuana products for which High Times seeks registration would be "lawful under state as well as federal law," the pertinent question, he argued, was not whether such goods and services are legal, but whether they exist at all. They do not—yet. But USPTO routinely permits applications for potential products, such as technological items in development, though it will not register such marks until the goods actually exist. Typically the USPTO allows three years for the product to come into existence and the trademark registration to issue.

What's so important about a trademark? "From a public-policy point of view, one of the most significant purposes of trademark law is to provide consumers confidence in the experience and predictability of their purchases," Doyle explains. "To have a patchwork of trademark rights around the country is really undermining that goal of predictability."

It looks like Doyle argued well. As a result, High Times will be the first applicant allowed to pursue a registration covering marijuana plants, seeds, flowers and edibles that are "lawful under state as well as federal law." Thus, when the odious Controlled Substances Act (CSA) is amended at last and cannabis is "To have a patchwork of trademark rights around the country is really undermining that goal of predicatability."

rescheduled, High Times will have staked its claim to a registration for "Cannabis Cup" goodies. The day will come when such treats are lawful across the land, and we'll have our brand ready to go.

There were hints that trademark rules would evolve with weed laws. Back in 2010, UPSTO recognized the proliferation of medical cannabis products and created a new trademark category: "Processed plant matter for medicinal purposes, namely medical marijuana." Cannabusinesses operating in the 14 med-legal states at the time jumped at the chance, hoping to trademark venerable names like Maui Wowie and Chronic. After a few months and hundreds of applications, none of which won a trademark, the agency rescinded the new category without comment.

In the years since, it's been possible to secure quasi-trademark protections by "registering around the edges," says Doyle.

For example, if you own a statelicensed edibles company and use the mark Vandale, you could register that mark for peripheral goods and services, like books, newsletters or even cookies not containing marijuana. Doing so would not give you a registration covering your core goods, but it would provide a hold for you to protect your mark until you can secure a registration for them. Or, you could register a trademark at the state level and hope that it sticks nationally later on.

Now, thanks to some legal perseverance and ingenuity, we have a way to establish a brand without resorting to "the edges." One might find it odd that trademark applications can be pursued on the basis of their products' non-existence. We find it thrilling. **

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High Times October 2016



MARKET ANALYSIS

Prices by the ounce

The Kind and Mids indices held steady in October, finishing the month within \$3 of their September averages. The US Price Index experienced the biggest drop this month, falling \$9, while the Schwag Index saw the largest gain, closing October \$20 above its previous average. Haze returned to the top five submitted strains for the first time since June.

US Price Index *YTD Average: \$312*

Kind Index *YTD Average: \$373*



Mids Index YTD Average: \$269

Schwag Index YTD Average: \$111

(Querkle)
"I brought my
own clones
from
Arkansas!"
-Rico, CO



TRANS HIGH MARKET QUOTATIONS			
STATE	CITY	STRAIN	PRICE
Alabama	Birmingham	Blueberry	\$350
Arizona	Phoenix	Skywalker OG	375
Arkansas	El Dorado	Grape Ape	350
California	Lake Tahoe	Girl Scout Cookies	120
Colorado	Rico	Querkle	200
Connecticut	Hartford	Bubba Kush	360
Delaware	Wilmington	East Coast Sour Diesel	375
Florida	Miami	Girl Scout Cookies	380
Georgia	Atlanta	Blue Dream	380
Hawaii	Maui	Trainwreck	350
Illinois	Chicago	Critical+	350
ndiana	Corydon	Purple Haze	320
lowa	Cedar Rapid	White Widow	350
ouisiana	New Orleans	Gorilla Glue #4	375
Maine	Portland	Girl Scout Cookies	280
Maryland	Baltimore	Chemdog	400
Massachusetts	Boston	JillyBean	360
Michigan	Kalamazoo	OG Kush	300
Minnesota	Minneapolis	Headband	375
Mississippi	Oxford	Skywalker OG	360
Missouri	St. Louis	Mr. Nice Guy	250
Montana	Missoula	Blue Dream	320
Nevada	Las Vegas	Tahoe OG	400
New York	Brooklyn	Three Kings	360
North Dakota	Bismarck	Tangerine Haze	300
Ohio	Columbus	Purple Haze	380
Oregon	Portland	Yeti OG	120
Pennsylvania	Philadelphia	MK-Ultra	400
Tennessee	Nashville	Hydro	560
Texas	Austin	Ghost Train Haze #1	375
Utah	Salt Lake City	Bubblegum	400
Vermont	Burlington	Chemdog	320
Virginia	Richmond	Master Kush	360
Washington (Seattle	Cheese	220
Wisconsin	Madison	Northern Lights	350
INTERNATIONAL		Ligitus	330
Canada	Quebec City	Girl Scout Cookies	C\$160
	Regina	Cotton Candy	200
United Kingdom	London	Kong	£225

High Times wants to know what you're smoking. Submit your strain information including location and price by the ounce to *thmq@hightimes.com*, or tweet us (*#THMQ*).

Dankness Doesn't (Meed a (Mame

2015

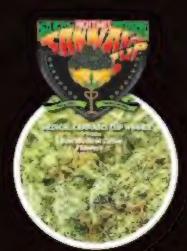


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2016







Nameless, Mega Queso Ist Place - Best Medical Sativa Flowers



Nameless OG with Gold Coast Extracts, Budder Chips 1st Place - Best Indica Concentrate



Nameless Mega Wellness O.G. with MOXIE 710, Live Resin Cake Badder 1st Place - Best Hybrid Concentrate

Mo name just flame

Collectives, DM Nameless Genetics on IG for more info namelessgenetics.com | @@namelessgenetics_



They live life to the beat of a different drummer, are sure of who they are and what they stand for.

They're the free and forward thinkers, innovators and creators whose ideas and words inspire, polarize, spark imaginations and powerfully connect.

They're rebels, outcasts, Davids in a world of Goliaths, that come from the least likely of places.

They tread where others fear to go, dislike conforming to the norm, and don't care much for the man or his machine because they truly embrace freedom.

It's hard to fool them because they have a clear perspective on the world and see things for what they really are.

They're fiercely aware of what's right and wrong, speak their minds and take no prisoners.

They look at life differently, society can't pigeon hole them or put them in box, and they see things where others don't.

Their ideas are sometimes out on the fringe, the ragged edge. They have to be, because they're open to the possibilities and realities that change the world.

Some see them as a fish out of water, trouble makers and oddballs. We see them as gifted, profound and uniquely brilliant.

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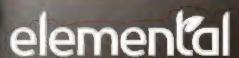
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elementalwellnesscenter.com



ix years ago, voters rejected a ballot initiative that would have made California the first state to legalize recreational marijuana. While it would still be another two years before Colorado and Washington turned that dream into reality, 2010 nonetheless proved to be a banner year for bud—especially by the Bay, where High Times held its first-ever Cannabis Cup on American soil.

As the birthplace of medical marijuana, San Francisco was the most appropriate city to host our inaugural celebration of med-pot, and after holding 22 High Times Cannabis Cups in Amsterdam, we were eager to bring our preeminent pot party to the US for some homegrown marijuana.

Fast-forward to today. High Times has now held well over 20 cups nationwide, with seven taking place in Northern California. Four states and DC have all legalized recreational cannabis; half of the country

has comprehensive medical marijuana programs; and 10 states are expected to vote on marijuana reform this November.

Yes, a lot has changed throughout the country; however, California's legalization landscape looks damn near identical to the scene we saw in 2010. Recreational marijuana is back on the ballot, but it's not necessarily an easy win. Just as Proposition 19 sparked contention between marijuana advocates, California's current initiative—the Adult Use of Marijuana Act (AUMA)—has activists, attorneys and authors alike up in arms, squabbling over its rules and regulations.

So with our minds made up to medicate (and our fingers crossed for future recreating), we kicked off the 2016 NorCal Medical Cannabis Cup at the legendary Cow Palace, eager to delve into the issues surrounding AUMA and learn more. Dabs, debates... and dads; it was, indeed, Father's Day weekend, so we had it all!

48 Medicating by the Bay













1) At Critical Concentrates the Cup crowd could get critically medicated. 2) Elemental Seeds displayed its award-winning True OG. 3) At Big Sur Extracts, a bow-tied dab master assisted eager dabbers.
4) Concentrates fit for royalty, by King of Wax
5) The theme of the Cup, as always, is fresh nugs!
6) Big Gigantic provided electronic beats and a trippy light show.

San Francisco's laid-back vibe and chill attitude provided a nice contrast to the romping circuses we generally see unfold at many of our Cups in other cities. (If SoCal is your adorable little brother who just discovered candy and can't seem to come down from his sugar high, then NorCal is your cooler older sister who's totes down to share her gourmet chocolate.) The first day was beautiful, with clear blue skies beaming down upon heaps of gorgeous ganja. Hundreds of attendees roamed around, passing joints, lighters and butane, as the assembled vendors showed off their dankest products.

Musical duo Big Gigantic kept Saturday's party going late into the night with their electronic beats, live instruments and trippy lights, but for many California voters, the real show (or at least the most educational one) didn't happen until Sunday on the seminar stage.

"The Facts About AUMA"—a panel discussion dissecting the pros and cons of the





50 Medicating by the Bay









controversial initiative—was by far among the most highly attended seminars of the weekend. After quick introductions, prolific author and cannabis expert witness Chris Conrad began the dialogue with a comprehensive run-through of the legislation and disclosed his support for the measure.

However, others on the panel were quick to voice their concerns. "I see that there are important things in AUMA that we have to pass—they're important," said Debby Goldsberry, renowned cannabis activist and executive director of the Magnolia Wellness Collective. "But then I see a few things in there that I think are 'poison pills."

The one thing that bothers her most about AUMA, Goldsberry explained, is that it prohibits the use of cannabis anywhere that tobacco is used—a right that California's med-pot patients currently have.

"By taking away that right, I believe that is going to continue to target the people who are the most targeted by the War on Cannabis, which is our black and Latino friends who use cannabis, and people who don't have a place to smoke cannabis in their home."

Fellow panelist Andrew Koussevitzky, an attorney with Margolin & Lawrence, a law firm specializing in medical marijuana defenses, agreed with Goldsberry's point regarding black and Latino communities, calling it "a







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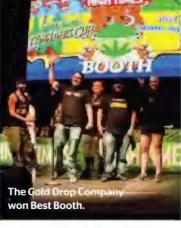


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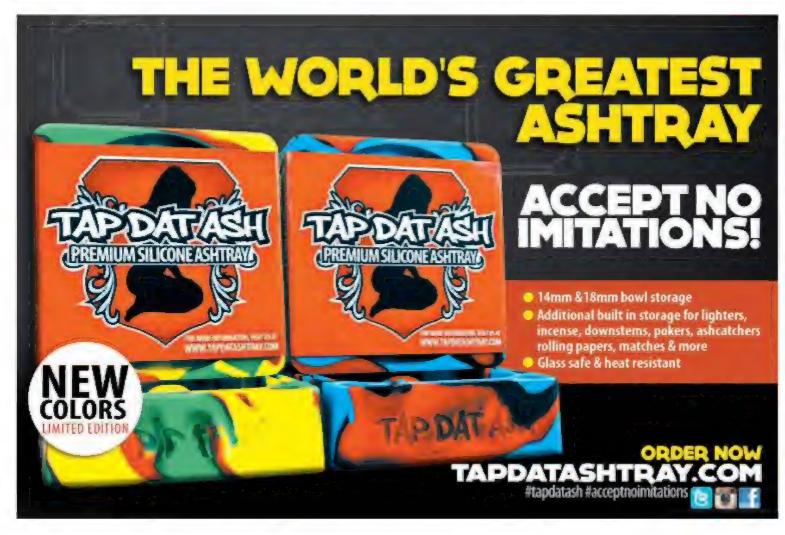
huge issue," but went on to defend his firm's pro-AUMA stance.

"It will help the little growers, the little sellers, and transporters around the state not worry about going to jail," Koussevitzky said. "That's a huge liberty that we think is necessary in order to move forward. And that needs to be a priority for everyone before we consider money and taxes and the economic impact We're still putting people in prison nonstop, and it's crazy. That needs to stop."

Rounding out the debate was cannabis defense attorney Bill Panzer, who took an even more pragmatic approach to the issue, pointing out that cold, hard cash is the only reason AUMA made it onto this year's ballot in the first place.

"The bottom line is this: Since Prop. 19, every two years there's been something written that's better than AUMA—potential initiatives that would legalize," Panzer said. "And none of them have come up with the money. I'm of the opinion that if we don't go with AUMA and wait another two years, then, yes, we can definitely get an initiative written that's better than AUMA—but I don't see where the money's gonna come from to put it on the ballot."

Controversy aside, we're dreaming of the day we can hold a recreational Cannabis Cup, open to all, in California. Let's just hope it doesn't take another six years. *









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BEST BOOTH

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BEST PRODUCT

1st Place EZ Squeeze Rosin Press, by Gold Drop Co.

2nd Place Sapphire Kush Pre-Rolls, by Northern Emeralds

3rd Place Tie - Liquid Shatter, by Royal Gold Extracts and Southern Humboldt Farms

BEST VAPORIZER

1st Place Puffco Plus, by Puffco 2nd Place Atomik 3rd Place 710 Kingpen, by Greenwolf

BEST GLASS

1st Place Scozz Dragon, by Exotic Genetix

2nd Place Rodeo Smoke Shop **3rd Place** Atomik

BEST VAPE PEN

1st Place Velvet Kush Cartridge, by Vegan Buddha with New Amsterdam Naturals

2nd Place Hawaiian Gold, by Gold Drop Co. and Jahnetics with Blue River 3rd Place The Monarch Florida Juicy Fruit Cannabis-Derived Terpene Vape Pen, by the Legion of Bloom

BEST TOPICAL

1st Place Prana CBD Roll-On, by Harborside Health Center

2nd Place Lionz Share 500 mg Extra-Strength Pain-Relief Cannarub, by Lionz



Share powered by Moxie Extracts **3rd Place** Honey Pot Cannabis-Infused
Healing Spray, by Honey Pot

BEST INFUSION

1st Place Atomik Special Edition Diamond Moon Rocks Collab with Moxie, by Atomik & Moxie

BEST NON-SOLVENT HASH

1st Place Strawberry Banana God Sap, by Bubbleman and Blue River 2nd Place Black Mamba Cubantech Dry-Sift, by Exotic Genetix with Cuban Grower

3rd Place Vegan Buddha Candyland Rosin, by Greenwolf with Vegan Buddha and Neverfallin89

BEST CBD FLOWER

1st Place CBD OG, by C.R.A.F.T.

BEST CBD CONCENTRATE

1st Place Strawberry Banana Goo CBD, by Gold Drop Co.

2nd Place CBD/THCA 1:1, by Guild Extracts

3rd Place Sour Tangee Pure Terps CBD, by Pure Terps

BEST CBD EDIBLE

1st Place Healing Honey CBD/THC Medicated Honey, by Critical Concentrates

2nd Place Liquid Dreams 25 mg 1:1 CBD Capsules, by the San Jose Patients Group

3rd Place Caramel Applejack CBD OG Lollipop, by C.R.A.F.T. and Ladies Line Collective

BEST INDICA FLOWER

1st Place The OG Kush Story, by Cali Kush Farms and Greenwolf LA 2nd Place Kosher Kush, by the Canna-Cruz Collective

3rd Place Kush Company OG, by Kush Company

BEST INDICA CONCENTRATE

1st Place Lemon Fuel OG, by the Gold Coast Collection

2nd Place True OG Live Resin, by Elemental Seeds

3rd Place Lemon Candy, by Critical Concentrates & Mally Elite

BEST HYBRID FLOWER

1st Place Veganic Platinum Cookies,

by Buds & Roses
2nd Place Apple Fritter, by the Great
Indoor Dispensary
3rd Place Sour Girl, by C.R.A.F.T.

BEST HYBRID CONCENTRATE

1st Place Orange Strawnana, by the Gold Coast Collection

2nd Place Fresh Cherries Live Resin Cake Batter, by Fresh Off the Bud with MX710

3rd Place Gorilla Glue Live Resin, by Alpine Vapor

BEST SATIVA FLOWER

1st Place Sour Tangie, by CannaCruz **2nd Place** Super Lemon Haze, by C.R.A.F.T. and the Cannabis Conservatory

3rd Place Sour Apple Haze, by the Great Indoor Dispensary

BEST SATIVA CONCENTRATE

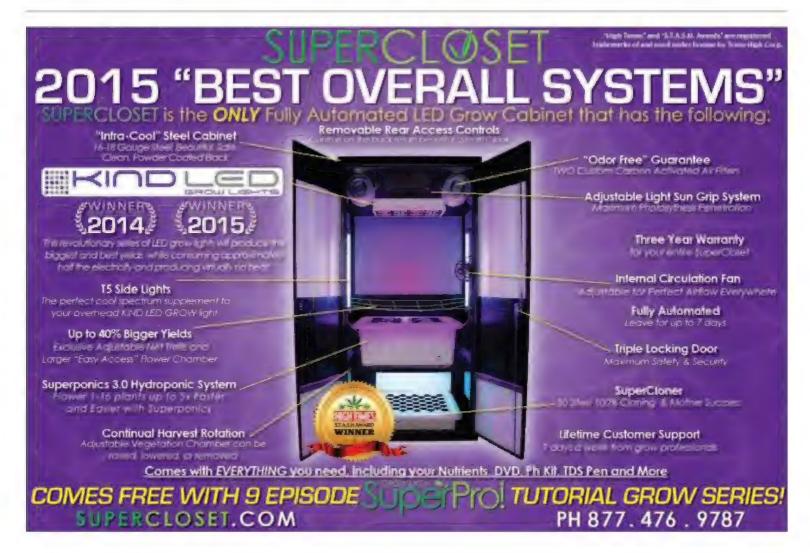
1st Place Blood Orange Tangie, by Southern Humboldt Concentrates with Southern Humboldt Farms **2nd Place** Jack Herer THCA Crystalline,

by Guild Extracts **3rd Place** Orange Nectarine, by Gold

3rd Place Orange Nectarine, by Gold Coast Extracts and Nameless Genetics with Cal Hemp Farms

BEST EDIBLE

1st Place Extra-Strength Medicated Honey, Artisan Edition Solvent-Free, by Baked Bees with Gold Drop Co. 2nd Place Sababa Snacks: Caramel Cashew Apricot, by Sababa Snacks 3rd Place French Medicated Macaroon, by Madame Munchie



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Chine Skin – increases in Associated and the second street harves the complete straighter and support bulkier, heavier buds. You'll get big shicky, potential rests will up a straighter and support bulkier, heavier buds. You'll get big shicky, potential rests will up a straighter and support bulkier, heavier buds. You'll get big shicky, potential rests will up a straighter and support bulkier, heavier buds. You'll get big shicky, potential rests will up a straighter and support bulkier, heavier buds.

Fluid Factor X—frigger regions a spirit of teleposes (SAR) with a set to produce marked concurs of ensuring 2000 and main product of the system for the set of the post of the system of

8-52—Amplifies overall plant mit and his promotion of the state of the



OVERLOOKED AREA FOR GETTING POUNDS OF BUDS

Sensizyin - Specifically formulated enzymes that some the root zone, removing debris and eradicating devices by "recycling" it into usable carbohydrates that fuel bud are who and boost yields. Growers report it also decompany to zone debris so well, you can often reuse growing made such as tackwool and some as it is another engineers.

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High Times October 2016

Geting Indiana Indiana

With more than half of the United States now recognizing some form of legal marijuana use, medicinal or otherwise, the time is right (as in: right now!) to find a job in the cannabis industry. By Jen Bernstein



elcome to the *High Times* Pot Jobs Report for 2016. The continued mainstreaming of mari-

juana means more job growth and more business opportunities for Americans looking to join the green rush.

Cannabis has now become the fastest-growing sector of the US economy. According to the research firm New Frontier, 2015 was a "watershed year for the legal cannabis market," with sales growing from \$4.6 billion in 2014 to \$5.7 billion last year—and the company anticipates a 26 percent increase in 2016, with the market closing the year at \$7.1 billion. New Frontier further predicts that by 2020, legal market sales will soar past \$22 billion.

Compared with other industries, cannabis is experiencing astronomical growth—surpassing the sales figures for organic foods, craft beer and hybrid vehicles. And if you ask Americans if they think marijuana should be legal, a resounding 56 percent say "yes," according to the most recent CBS poll.

Even bigger news may be in store, as 2016 could well be the year in which the scales are tipped decisively in favor of legalization, with seven states—California, Nevada, Arizona, Massachusetts, Maine, Rhode Island and Vermont—voting on whether to approve recreational use by adults.

But if you really need an indicator of marijuana's popularity, get this: In 2015, Americans spent nearly five times as much money on pot (\$3.4 billion) as they did on Oreo cookies (\$711 million), according to "Rebranding Marijuana," a report by the Madison Avenue cultural pulse-takers sparks & honey.



Along with marijuana's mainstream acceptance comes plenty of exciting career opportunities in the cannabis space. But if the industry really is rife with jobs and there's money to be made by budding ganja-preneurs, where should you start? How do you get your foot in the door?

CEO & Brand Ambassador for Chong's Choice Profession: World-famous comedian, activist, actor and stoner

Locations: 25 dispensaries in California

Background: Known as one-half of the legendary stoner comedy duo Cheech & Chong, Tommy Chong didn't find it much of a stretch to create and develop a premier cannabis brand. With careful attention, he handpicks the highest-grade specimens of Chong Daddy Purple, an indica strain; My Friend Jack, a sativa; and Choice OG Kush, a hybrid. Rounding out the product line are THC-infused breath strips, disposable vape pens and a five-pack of pre-rolled joints.

Why cannabis: When it comes to Tommy, do you really need to ask? Unlike many budding entrants in the legal cannabis industry, Chong didn't exactly need to go through a formal interview process, but he preaches that you "really have to love what you do—and I happen to love weed!"

Getting involved: Chong says he doesn't seek out marijuana; it just comes to him. "The thing about Chong's Choice, we tried different strains, but there's so many strains growing as we speak. So rather than going for the strains, we went for the whole plant—and the grower. So Chong's Choice is a collection of the best growers in America under one banner." After signing the growers on, Tommy explains the distribution deal and how they connect with compassion clubs and dispensaries.

Qualifications: Never shy about his eternal love for weed, Chong is "unofficially known as the Pope of Dope—so I guess my title is 'Pope,'" he says. "Or maybe 'professional operational pot tester."



60 Getting In On the Green!



Advice: "To become good at anything," Tommy says, "you have to practice, you have to learn, you have to study, you have to research. You *gotta* research! So my word, for everybody, is *research*. Do your research. If you wanna become a grower, learn how to grow. It's not hard, but it is hard...

"See, in this world—especially in the pot world—no one is going to give you anything," Tommy adds. "I can't give you the expertise, or the love, or the knowledge, or the impetus to do anything unless you really want to do it. Find something that you really love to do, and that way you'll never work a day in your life. That's the way my life was."



Gerald Greenspoon

Co-managing director of
Greenspoon Marder
Profession: Lawyer
Locations: California, Colorado,
New York and Florida; currently
looking into Washington, Oregon,
Arizona, Massachusetts and
Pennsylvania

Background: With a solid foundation representing clients in regulated industries like alcohol, tobacco and firearms, it made perfect sense that Greenspoon Marder would expand its national corporate practice to include cannabis law. From representing investors to helping processors and retailers navigate the complex and ever-changing world of state laws and regulations, Gerald Greenspoon and his firm of 180 attorneys even have plans to create their own compliance program to help shape the cannabis industry.

Why cannabis: Over the past several years, Greenspoon has observed the maturing of the industry. "Cannabis is a serious business that will continue to expand and is here to stay," he concluded. With clients across the country expressing significant interest in the industry (and with significant dollars to invest), Greenspoon saw a lot of people "waiting to enter this business and looking for advice and consultation."

Getting involved: "We've chosen the road of locating attorneys within each state that have been involved in the marijuana business in some fashion for several years and are experienced—so we're not starting from scratch, but with practitioners who understand the regulatory scheme and the business issues involved.

Is the Weed Industry for Me?

David Bernstein of weedhire.com suggests asking yourself the following questions before deciding to take the plunge—and making sure you have the answers, especially before you go for a job interview.

What's your interest level?

Are you passionate about cannabis and know everything there is to know about the industry and the plant? Or are you just starting out and willing to learn? Whatever your interest level, employers will be impressed if you've done your homework. It also helps if you don't care about the stigma that still surrounds cannabis in many places. Being a cannabis user isn't necessarily required for getting a job in the industry; in fact, depending on the position's responsibilities, a nonuser might even have an advantage in getting hired. Either way, employers will be more likely to hire you if you show you understand that they're trying to grow and run a business just like any other employer in any other industry. Remember, your number-one job is to be a valued, responsible and reliable member of this person's staff.

What do you bring to the table?

If you have marketable skills, chances are you can apply them to a job in the cannabis industry. Whether your expertise is in office management, administration, horticulture or biology, your skillset and past experience will be selling points to a prospective cannabusiness employer.

At the same time, don't be afraid to step outside your basic skills. For example, if you have experience in any area related to agriculture or landscaping, you could fit in on the production side of a cannabis grow. If you're involved with construction, you can lend your expertise to building an indoor facility. The same goes for office management, human resources or information technology. These are areas that form the backbone of many businesses, including cannabis-related ones.

How committed are you?

Any good candidate will take the time to understand the industry. Even

more important is to understand the laws of the state that your potential employer operates in. If you present yourself with a full and clear understanding of both the upside and the challenges of operating a cannabusiness, employers will see how dedicated you are to the professional, career-development side of your goals.

Where do you see yourself in five years?

This is a typical interview question in many industries. For cannabis, it's particularly important. Remember, the majority of businesses in this industry have been around for only a short time. This is a crucial stage for many cannabis companies, as the next few years will determine their staying power as established businesses. Most employers don't want to deal with high employee turnover, and the hiring costs and difficulties in qualifying new workers can be even more time-consuming and expensive for cannabusinesses.

Are you willing to weather the peaks and valleys, or periods in which the business takes three steps forward and two steps back?

If you're seriously looking for a career in the cannabis industry, you're likely not going to see a big financial payday in the short term. Are you willing to take a lower-level (and lower-paying) job to gain the necessary experience and get your foot in the door? Employers will know if you're overqualified for a position very quickly and may not have the resources to offer a highcompensation package right off the bat. "Sweat equity" is a term commonly used in many startup businesses; employers look for potential workers who can see the big picture long-term, not an immediate payday upfront.

That's why it's important to set realistic expectations about what kind of compensation you're looking for before you start applying for jobs in the industry. Remember, due to the sensitive nature of working with cannabis (both legally and, in some places, socially), employers want staffers who will be in place for many years and are willing to build their career with that business. They're looking for people who want to go above and beyond, not just the typical 9-to-5 employee.









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Five-Leaf Clover Chloe Villano, the founder and president of Clover Leaf University, answers your questions about how to get a job in ...



Cultivation

Cultivation is the hardest part of the marijuana business. It takes strict dedication and attention to detail to grow an efficient crop. We are noticing a huge demand for scalability and sustainability for final products for consumer and community safety. Understanding pesticide regulation by receiving your pesticide-application certification and pest-management training is one of the most important things to being a legal cultivator. These certifications will be imperative to getting and keeping a good job in the industry, and they could be mandated in some states.

Horticulture classes and any agricultural experience would be beneficial to the growth of your skills. You must remember that growing cannabis is not like growing tomatoes, and many business owners will want somebody who has had hands-on occupational experience. Get a job, start at the bottom and work your way up is always a great way to learn and gain experience. If you work really hard, you can excel with the company.

Topicals

If you're an engineer, scientist, doctor or somebody with scientific experience, topicals can be a very fun side of the cannabis industry. The license required to make topicals is a manufacturing license or an infused-product manufacturer's license, known in Colorado as the MIPS license. These licenses are not required to be vertically integrated (meaning that you also grow your own), but they can be if you desire-some have cultivation jobs attached to the business, but not all do. When it comes to infused-product manufacturers, the most important thing is safety and cleanliness. Any safety training, food handling, packaging, labeling, or wholesale transportation classes and experience would definitely help you land a job working in topicals.

Edibles

While edibles manufacturing can be a lot of fun, it's also one of the most regulated parts of the cannabis industry. Edibles manufacturers are required to hold an infused-product manufacturing license. Jobs and careers include cooking, creative design, packaging, labeling, artistic design, branding, transportation and business expansion. Many states have required minimum and maximum doses, and edibles manufacturers must



remain in strict compliance to make sure their doses do not deviate from those standards. Any Health Department classes for food and safety handling, and all other required classes regarding diseases, molds, microbials, etc., would be beneficial to your expertise and help land you a job working in edibles.

Concentrates

Concentrates are by far the highest-liability business for an employer. In Colorado, they've implemented a Class I, Division I lab build-out requirement, which means that employees have additional regulations and requirements to meet to operate machines, use supercritical-fluid extractions and produce final products. There are strict regulations from the seed to the creation of the infused product, to the packaging and final transportation. If you want to get a job in concentrates, you need to understand safety data sheets and

supercritical-fluid-extraction safety procedures, and gain occupational experience by starting somewhere in one of these facilities.

Machine safety training is also a plus. A good recommendation is to apply for a job and learn the business while building relationships. A few years of on-the-job training and working your way up will show any employer that you're committed.

Ancillary Businesses

Ancillary businesses are by far the fastest-growing sector in the cannabis industry. Even though this is a new industry and the businesses are very young, they can be excellent places to get started. If you're a designer, construction builder, engineer, marketing director, event planner, culinary art chef or have any other type of experience that could be beneficial to the industry, then working for an ancillary business would be great for you.



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Pot Jobs: Five Spliffy Cannabis Careers

As more states adopt medical marijuana programs and others legalize recreational cannabis come November, look for a slew of new job openings in the fastest-growing industry in the United States: weed!

Chefs, Bakers and Edibles Creators

The edibles sector is one of the fastest-growing in the industry after cultivation. If you have culinary skills, why not try them out in a kitchen creating recipes that incorporate cannabis? The demand for new products and innovative food ideas is strong, since a large percentage of people using cannabis these days, especially for medicinal purposes, prefer to eat their weed-which makes it a smooth way to help the medicine go down.

Extraction Artists

Career paths in concentrates include operators, technicians and managers.
These specialized jobs often

require a background in chemistry or engineering, not just an expertise in dabbing. But these days, thanks to the increasing popularity of concentrates, training and certificate classes such as those offered by Havelick & Associates are available to help you on your way.

Recruiters

Before pot-legal states came into the picture, it would've been impossible to imagine a day when recruitment offices would specialize in hiring professionals for the marijuana industry. Today, there are firms hiring for full-time positions in Colorado, Oregon and Washington State—but since a recruiting business doesn't work

with the plant itself, you could potentially operate one in any state. And as new medical states continue to come online, businesses will turn to recruiters like CannaMed Talent Solutions, jointhegreenrush.org and weedhire.com to help staff dispensaries, cultivation facilities and offices with the most qualified candidates.

Web Developers and Programmers

Most new cannabis ventures will need a website to attract and inform the public about their services or wares. Web developers and programmers can easily and seamlessly transition their computer skills to any new start-up looking to create online presence.

Compliance Officers

Historically, marijuana's popularity spread thanks to a freewheeling counterculture that existed to break the rules, not follow them. These days, however, the road to legalization is being paved by cannabusinesses that scrupulously adhere to the rules and regulations that guide the emerging industry. Welcome to the brave new world of taxed and regulated cannabis, with each state creating legal standards for these new businesses-as well as jobs making sure that these standards are being followed. If you have a penchant for dotting your I's and crossing your T's and want to help state programs succeed while getting paid to do so, research the complianceofficer jobs posted on industry and government websites, especially on the state level. *



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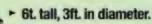
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October 2016 High Times 67



Trailblazing

Colorado's MMJ America, guided by Jake Salazar, emerges as an industry leader. Story & photos by Dan Skye

arts and all, the
United States is still
the land of opportunity. The settlers of
the American West
knew that. Most migrated to new territories because the prospects for building
a better future where they came from
were few and far between, or because
the lure of adventure simply dwarfed the
comforts of home.

The dream of owning land, or of reinventing oneself, roused the pioneer spirit in America. Once awakened, it was infectious, and America has never had a shortage of adventurers. There are parallels with Colorado's cannabis industry. When voters passed Amendment 20 in 2000, the state constitution was changed to allow the use of medical marijuana by doctor-approved patients. People began to dream—not unlike considering the opportunity to board a wagon train heading west: Is there a better life out there? Could an actual cannabis industry be created?

Not right away. The industry needed a safe trail, one relatively free of danger. So during the first few years of legal medical marijuana in Colorado, the new cannabusinesses operated cautiously.

"When we got started back in 2007, we

were just caregivers," recalls Jake Salazar, the CEO of MMJ America, one of Colorado's premier dispensary chains. "We were growing small amounts of plants, doing business with two dispensaries. There were only about 1,200 patients in the entire state."

But the proverbial door marked "opportunity" swung open for Salazar—and a whole lot of other people—in 2007, when a Denver district judge ruled that caregivers could not be limited to just five patients and that the new law allowed caregivers to "dispense." Colorado's Green Rush was on!

Salazar was already an experienced

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entrepreneur. A native of Boulder, he grew up excelling in sports and earned a full baseball scholarship to the University of Northern Colorado. But life threw him a curveball: In his third year there, he blew out his knee.

At age 22, business became Salazar's new ballpark. He opened a Benihana franchise, which thrived, and sold it five years later at a huge profit. "It was my first introduction to business," he says. "How to run it, how to sell it."

Salazar is defined by his energy. He's got the sparkplug mentality of a baseball middle infielder: tuned to the action and quick on his feet. By his mid-20s, he was running his own real-estate company, though he was increasingly intrigued by the cannabis industry. "I had a couple of friends who were really good growers," he explains. "I always loved weed—even as an athlete, it was my go-to thing. But it was the laws surrounding cannabis that got me interested. I knew that this industry was only going to advance."

By 2009, the number of medical marijuana patients in Colorado had grown to 20,000. Then, in October of that year, the US Justice Department issued a policy

"I always loved weed—even as an athlete, it was my go-to thing. But it was the laws surrounding cannabis that got me interested. I knew that this industry was only going to advance."

memorandum (known as the "Ogden memo") stating that those who used cannabis for medical purposes and those who distributed it to them should not be targets of federal prosecution.

That pretty much opened the Oregon Trail for cannabis entrepreneurs and dreamers in Colorado and elsewhere. By the following year, the number of medical marijuana patients in the state surpassed 100,000, and hundreds of dispensaries were in business to serve them.

For Salazar and his partners, the journey began when the dispensary that had been purchasing their medicine decided to play hardball. "They tried to put the squeeze on," Salazar scoffs. "They demanded a lower wholesale price and threatened to yank our patients away from us. So, instead, we opened our first store in Boulder."

It was a small operation, with Web advertising only, but it flourished. As the industry took root, MMJ America began working with other businesses that were helping to draw up the legislation governing them.

"We began to build a business model based on multiple store locations and a larger cultivation," Salazar says.
"We dipped into our own pockets and brought on working partners, and over the past six years, we've worked together and expanded. We've now got seven stores in Colorado and another in Las Vegas, just off the Strip, with 40,000 square feet to grow in."

MMJ America also offers consulting services in other states where the laws permit grow operations and cannabis commerce. But the current crown jewel of MMJ America is its sprawling





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MMJ America found itself in the winners' circle repeatedly at this year's Colorado Cannabis Cup in April.

greenhouse in Denver, a 60,000-squarefoot facility on 3.2 acres. It was once Dardano's Flowerland, Denver's oldest garden center. When it closed, MMJ America took over the property. Suffice it to say, the flowers growing here are now in great demand.

The space is also being converted into an interactive attraction for the public to visit, with a retail space as well as viewing areas of the impressive cannabis garden.

One of MMJ America's foremost goals has been to expand into the genetics game. "In 2011, it became an important part of our business model," Salazar says. "Before that, we were running everybody else's stuff and really didn't understand the breeding process. So we just dipped into High Times, read about these breeders-where they lived, how to get a hold of them, like the Amsterdam guys who've been doing this for 20 years. We started flying around the world, finding these breeders and learning from them. We wanted to be a one-stop shop. We didn't want to outsource it; we wanted to do it ourselves."

Salazar credits his lead grower Malek as the force behind the thriving Vault seed bank. Malek leads a gardening crew that nurtures the 18 strains found in the Vault's portfolio.

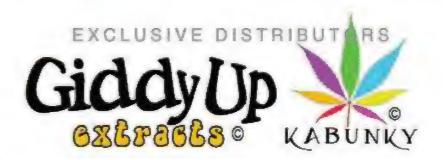
"It's almost five years now," Salazar says. "We really didn't enter any Cannabis Cups with the Vault genetics until 2013, and that was when we really started gaining some notoriety. At the Cannabis Cup in Amsterdam in 2014, with our grower friends in Amsterdam running our genetics, we took home three Cups. That was a huge deal for us, because we don't sell seeds on the international market; we sell them only in our brick-and-mortar stores."

MMJ America found itself in the winners' circle repeatedly at this year's Colorado Cannabis Cup in April, taking top honors for both Best *Indica* (Larry Walker OG) and Best *Indica* Concentrate (Cherry Kush Live Resin Batter). The company also saw three of its entries win second-place medals—Tora Bora for Best

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CBD Flower; Tora Bora Curese Resin Sap for Best CBD Concentrate; and Peach Ringz Micron 90 for Best Non-Solvent Hash. It also grabbed third place in the Best *Sativa* Flower category for J-Walker.

In the dynamic new cannabis industry, national brand-name recognition has become the goal. For Salazar, it's a near-obsession.

"I have a dual role as CEO," he explains. "First, we want to expand the brand and the business model of MMJ. Second, we've created a company out of Delaware called Blue Label Holdings, to which we've licensed all of our branding with all of our trademarks. This includes our standard operating procedures, our genetics, and all of our findings through DNA profiling and genomic research. We now market this consulting company across the country. We offer

"What really made you money? Were you watching the actual nuts and bolts of your company?"

a full-package deal where we come in and lobby high-level politicians and help create regulation. We've already been brought in by government agencies and consulted on laws. But we help individual investors, too, who want to help move their markets forward. We've been brought in to consult on people's cultivation operations and people's brands. Generally, once we work them, people realize that this is a really good brand."

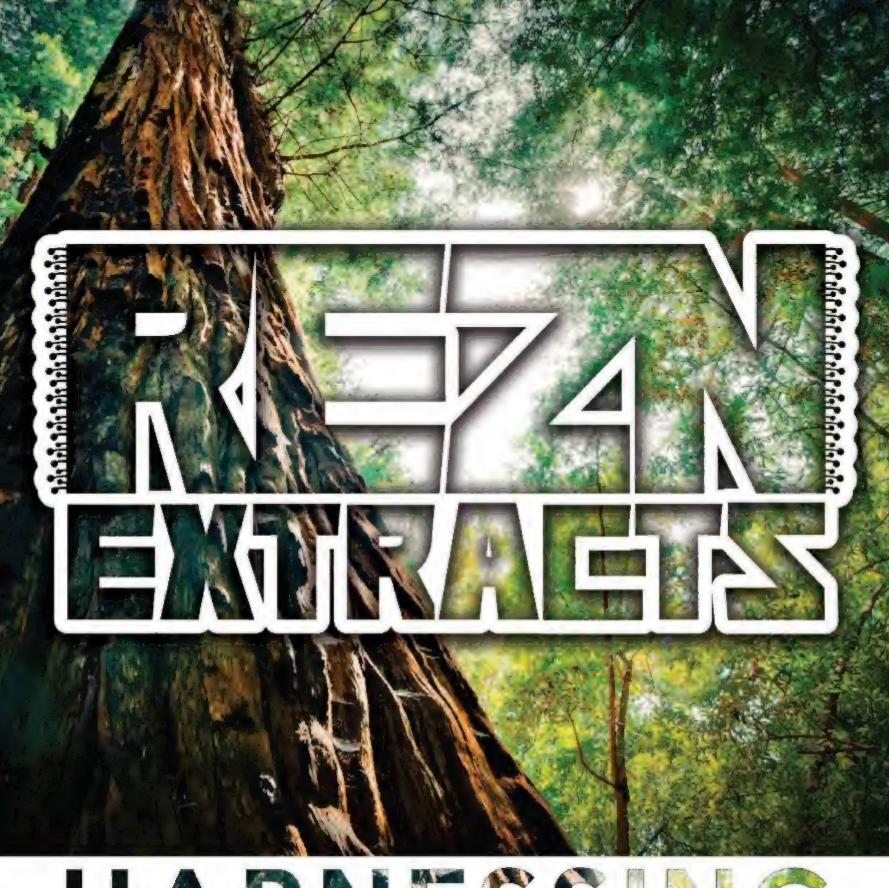
However, he's quick to point out that dreams and good intentions only go so far. "A lot of companies borrow money; they look at investor money as profit," Salazar observes. "That's because they've never had that kind of money in their accounts before, so they don't know how to act. They'll go out and overspend. But what really made you money? Were you watching the actual nuts and bolts of



your company? Were you watching your payroll? Were you watching your taxes? Were you watching what you spend on advertising? Were you actually paying attention to what your bottom line is? Do you know what your price per pound is, especially if your yields fluctuate? Do you watch your balance sheets and your P&Ls? This is all Business 101 stuff. Keeping your attention focused on these essentials is the key to success in this industry—or in any industry." **



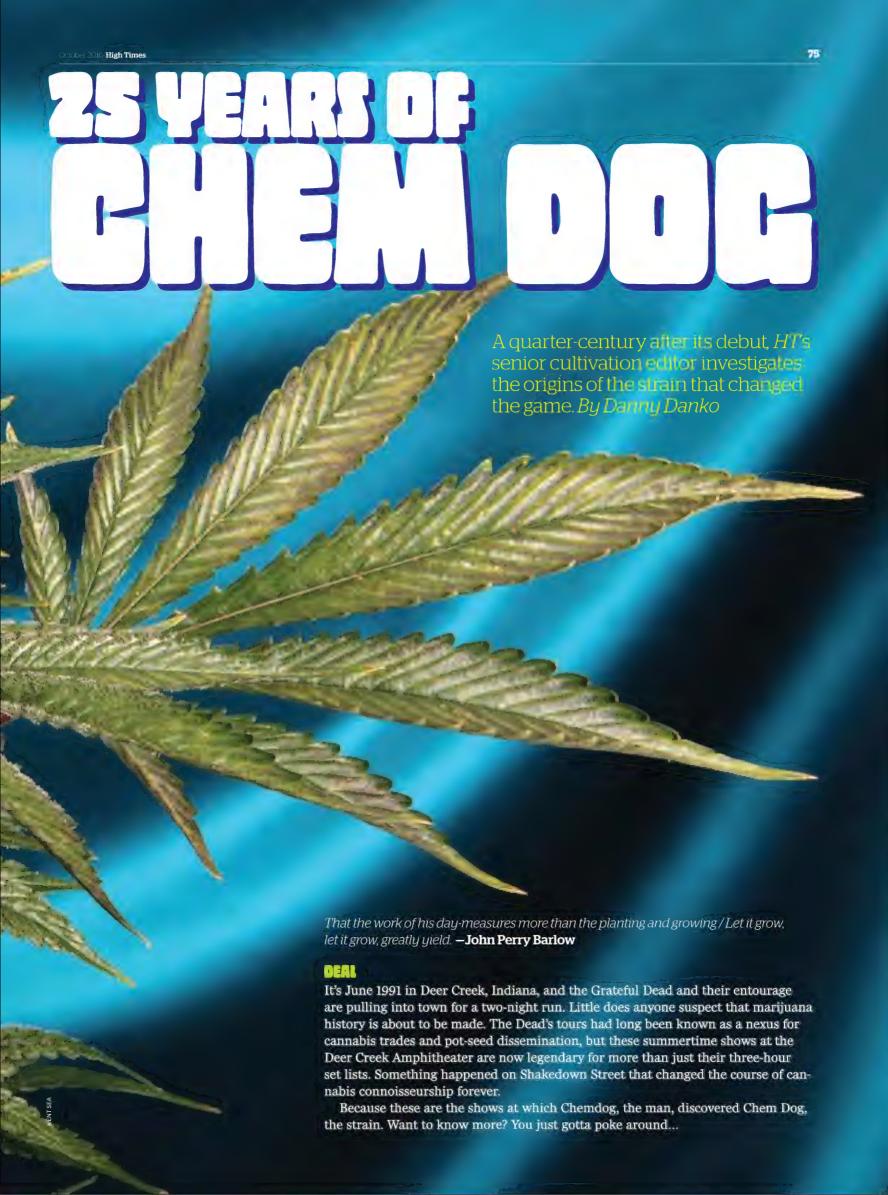




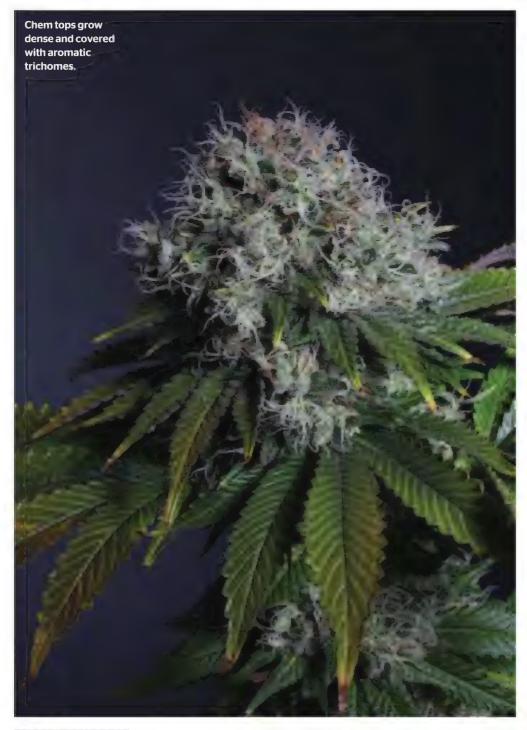
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76 25 Years of Chem Dog High Times October 2016



i need a miracle

As the story goes, Chem met P-Bud and Joe Brand on the lot in Deer Creek and purchased an ounce of a strain called Dogbud for \$500. Later, he asked Joe to mail a few more ounces to him in Western Massachusetts, one of which contained 13 magic seeds.

Joe Brand says he got a few pounds of Dogbud from some friends of a friend in Crested Butte, Colorado. Allegedly, the strain originated somewhere on the California/Oregon border. They called it the Dog, but Joe thought it tasted "chemmy" and nicknamed it Chem. Some called it Chemweed and others Dogbud. Chem combined the two names and came up with Chem Dog.

As P-Bud himself recently recounted to me, "It's amazing that the Chem Dog strains have been preserved all these years. When I first saw the Dogbud in 1991, I could not believe what I was seeing—I'm so glad Chem found those seeds and did what he did with them. And it was never 'Chem Dawg'—it's always been 'Chem Dog.' It's a combination of 'Chemweed' and 'Dogbud.' Joe Brand and I started calling the Dogbud 'Chemweed' because it tasted so strong. Chem took the words 'Chem' and 'Dog,' and there you have it... "

When Chem got home from the tour, he popped the first four of the 13 seeds. One plant was unfortunately a male and discarded. The three females were dubbed "Chem Dog" (now known as the Chem 91), "Chem Dog A" (now Chem's Sister) and "Chem Dog B." The 91 immediately became the most desirable and

went on to serve as a parent for many of the most popular strains of the last 25 years, including Sour Diesel, OG Kush and their many offspring. But these continue to be matters of much dispute, so let's hear from the folks who were there.

DID CHEM DOG BIRTH SOUR DIESELT

Interestingly, another jamband concert played a pivotal role in spreading the gospel of Chem Dog. Phish's 1992 show at the Roseland Ballroom in New York City is where Chem and Weasel first met. Once they realized they both had the fire, a friendship was forged and cuttings exchanged: Chem 91 went with Weasel to Staten Island, while RFK made its way to Western Mass. Just as the Dead passed their torch to Phish, so did Chem pass the flame to future generations of enthusiasts.

In late 1994, Chem's New York City acquaintance AJ (short for "Asshole Joe," though he's actually quite a nice guy) named an accidental cross of Chem 91 and an unknown hermie from Weasel's growroom "Diesel"; it was later dubbed "The Sour" by some friends in Albany, and eventually became famous as the NYC Diesel, AJ Sour Diesel or East Coast Sour Diesel. It quickly became the strain of choice for New York City's cannabis connoisseurs and hip-hop elites. Following a crackdown on urban weed spots by Mayor Rudolph Giuliani, the city's delivery services began to thrive and make a name for themselves largely on their ability to provide the *real* Sour Diesel.

Retailing at \$50 for about two grams, the Sour commanded prices heretofore unknown in the marijuana market. It wasn't unusual to hear of Wall Street types paying \$800 to \$1,000 an ounce during the late '90s, and the demand for super-potent strains continued to increase in the 2000s. The inadvertent impregnation of the Chem 91 with stray pollen, possibly from the DNL, produced one of the most iconic marijuana strains in history—often copied but never duplicated.

AJ tells me: "In 1993, I was a young, bright-eyed 20-year-old who was lucky enough to be standing in the right place at the right time. I'm eternally grateful to the spirit of this plant for all that it's done to enhance my life. The fact that there's a large, ever-growing constituency of people who have embraced the Dog and want to know everything about its history makes me happy and proud to have had a very small part in that story."





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DID CHEM DOG BIRTH DE KUSH?

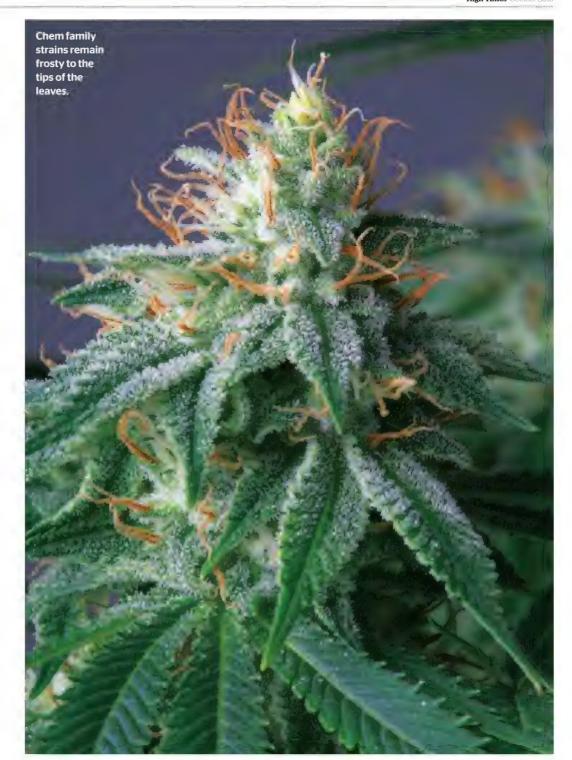
Less easily substantiated, the legend of OG Kush starts in Lake Tahoe, California, where a member of the crew-since deceased-traveled circa 1994 with an S-1 (selfed first-generation) bag seed of the Chem 91. Chem himself mentions some Dead shows in Tampa as the possible origin, since there were certainly some seeded Chem Dog buds sold on the lot during that leg of the tour. The provenance of the OG will always be in dispute, but its resemblance to the 91, and its proximity to the Chem family, makes this one of the more compelling and believable origin stories.

MICHT AS WELL

In 2001, Chem germinated three more of the magic seeds, labeling them "Chem Dog C," "D" and "E," with "D" being the keeper and becoming known as the Chem D. Over the years, Chem popped more beans and engaged in some amateur breeding projects, producing several other notable varieties like the Bubble Chem (Chem's Sister x Sagarmatha's Bubbleberry), Super Snowdog (Bubble Chem x [Superskunk x Oregon Sno]), Giesel (Chem D x Mass Superskunk) and Dawg Daze, a.k.a. Chem Haze (Chem D x [1993 Sensi Seeds NL #5 x Haze]).

THE POWER OF THE DOC

In a recent High Times cover story, "The Strongest Strains on Earth 2016," my colleague Nico Escondido detailed the astounding potency of the Chem Dog entered into our 2015 Colorado Cannabis Cup by Next Harvest. Extensive lab tests showed the strain reaching a new milestone. coming in at a whopping 32.13 percent THC-the first time ever that a strain entered in one of our competitions topped the 30 percent mark. This will come as no surprise to anyone who has smoked the pure Chem Dog, but it certainly confirms the strength of this sensi stalwart.



CROWING CHEM DOC

(from HT, May '06)

Chem's growing mix is regular Pro-Mix fortified with FoxFarm Marine Cuisine. Alternating between FoxFarm and Earth Juice products, he feeds mildly and only vegetates his plants for a week or so in 1-gallon buckets. Upon flowering, he transplants into 5-gallon buckets into which he also adds earthworm castings.

Even Chemdog's pest-control techniques are all organic. He chooses to use Safer Soap and yellow sticky traps to take care of stray mites and whiteflies. Knowing that vinegar and wine attract fungus gnats, he places the cups at plant level to drown these annoying insects

In between feedings, Chemdog uses plain water, 1 gallon per bucket every three days and then every two days during heavy flowering. In addition to the regular nutrient feedings, he provides humic acids in the form of Europonic Fossil Fuel once a week. During the last two weeks of flowering, only plain water is used to leach out any remaining salts.

The leaching process causes the fan leaves to turn fall colors, some yellows but also radiant reds and purples, as excess nitrogen and other nutrients are extracted. This results in clean-burning buds that burn to a light white ash, enhancing the flavor and smokeability of these amazing strains.









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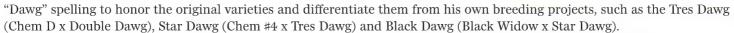
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THE FUTURE OF CHEM DOC: THE MUSIC NEVER STOPPED

In 2006, Chem reunited with Joe Brand and gave him four of the last six beans. Joe preferred the fourth one popped (Chem #4) and calls it the "Reunion Pheno." Chem-related strains continue to entice pot aficionados and make a name for themselves, culminating in an article by yours truly titled "CSI: Cannabis Strain Investigation—In Search of Chem Dog" (May '06), as well as my selection of Chem Dog as one of *High Times*' Top 10 Strains of the Year for 2006.

Unfortunately, the summer of 2011 brought some unwanted attention from law enforcement to Chem's door, and he was arrested and charged with cultivation and possession, forcing him to lie low for several years while serving his probation. During this lean time—in which Chem lost his home, his car and more—friends like Ben at the IC Collective, Skunk VA and that guy from Maine who kept the strains alive and thriving. Ben even won the High Times Cannabis Cup for Best *Indica* in 2014 in Sonoma County, California, with Chem Scout!

Another person working closely with Chem genetics is JJ NYC of Top Dawg Seeds. JJ changed his strain names to the



JJ NYC tells me: "I'm just happy and lucky enough to be associated with some of the people who were involved with one of the strongest strains available today. I would like to thank Joe B, P-Bud, Chemdog, the Weasel and Skunk VA. Everyone had a little role in the creation and preservation of the Chem Dog and its hybrids. I'm just amazed they've gone on to set the strain trends that we have around the world today. At the time, we had no idea that we were dealing with one of the strongest strains on the planet."

These days, Chem is happy to be finished with his legal issues. He's blowing glass pipes influenced by his mentor, Bob Snodgrass (follow @chemdog_glass on Instagram), and looking to expand the Chemdog brand. He owns the trademark for the name and will soon be appearing at marijuana gatherings, as well as collaborating with the IC Collective on some new genetics. So, until then: "Don't be a collector of more than you need / Got a lot of things growing, but keep watching your seeds..." **



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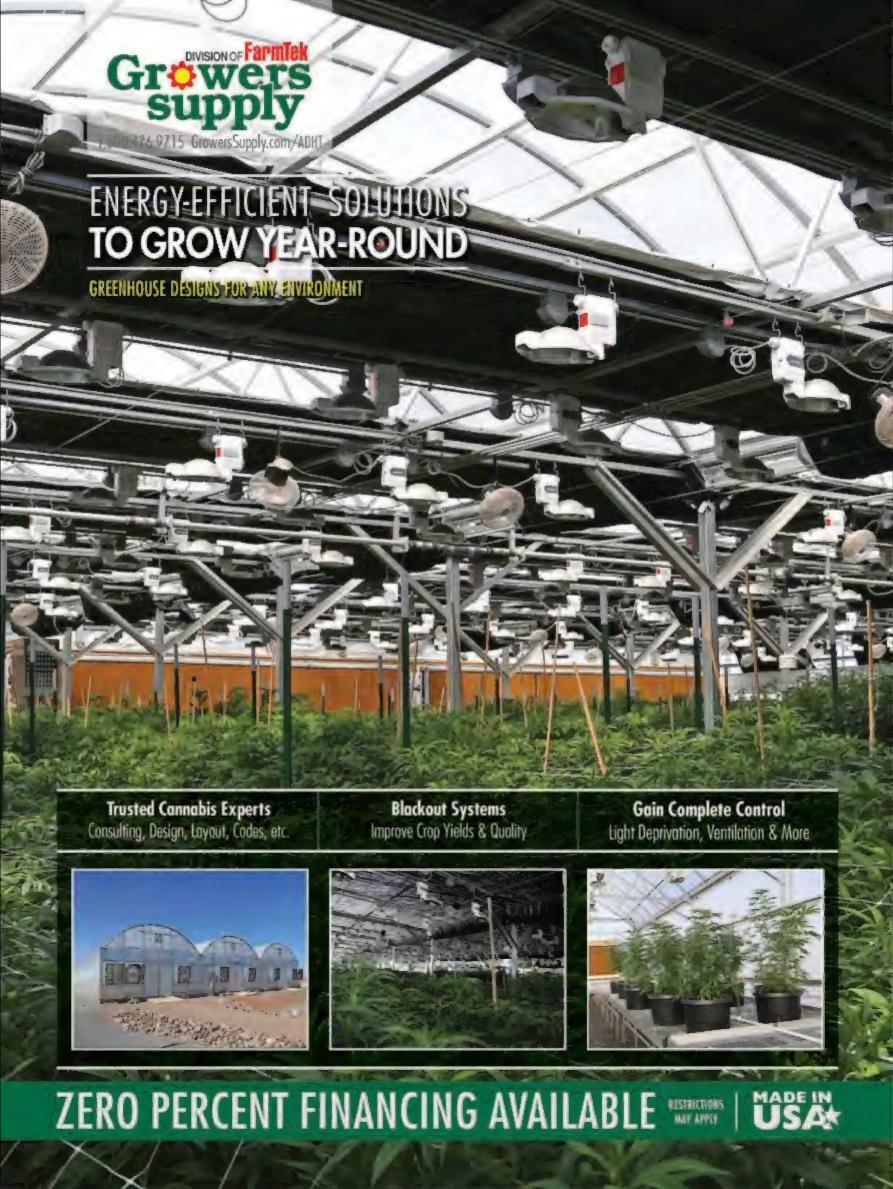






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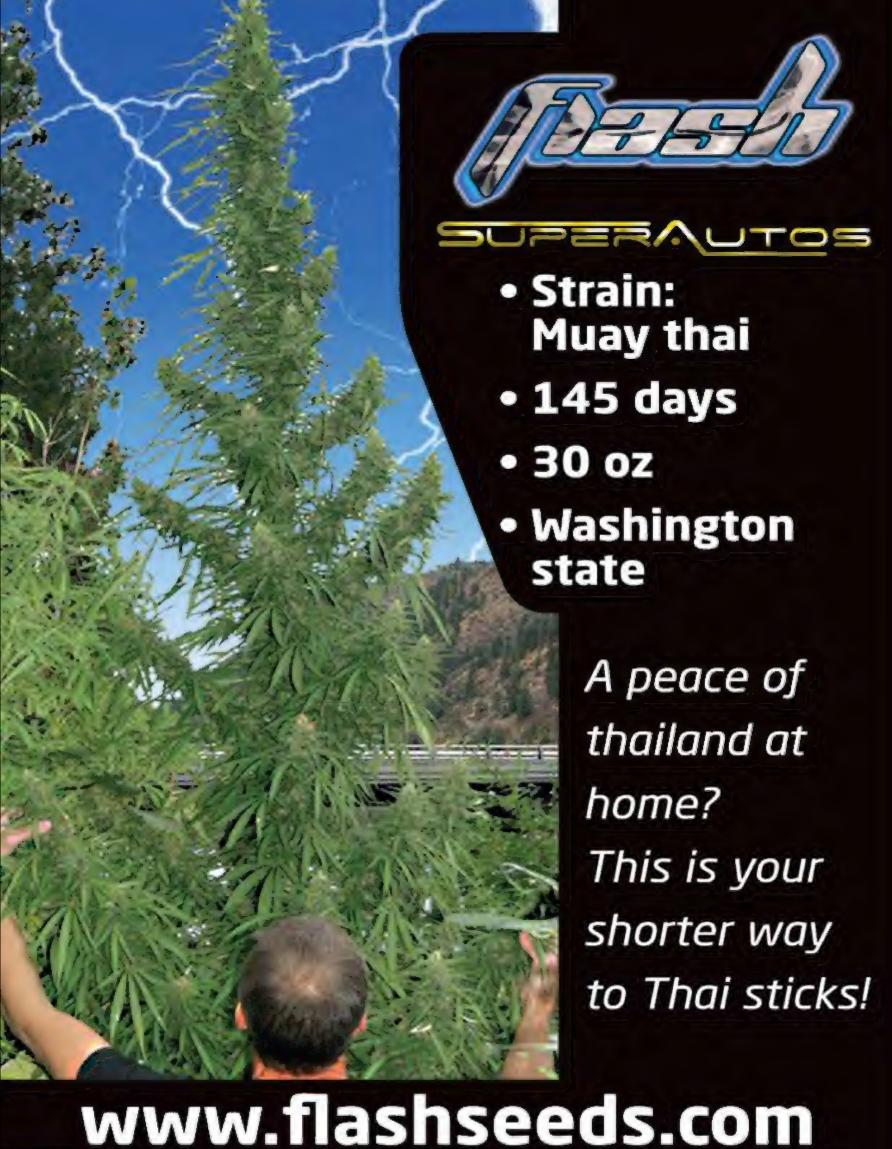
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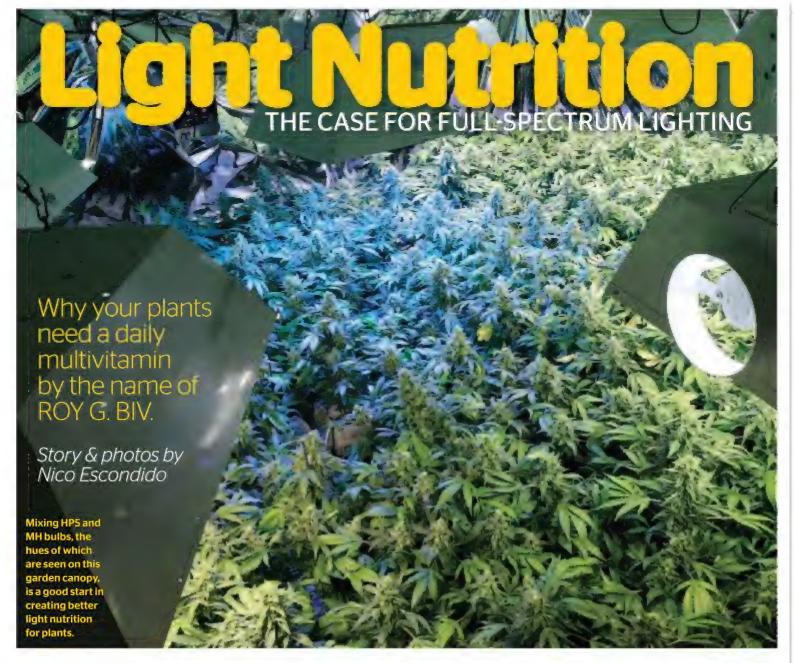
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October 2016 High Times 89



For nearly 40 years, indoor horticultural lighting didn't change much. Every cannabis cultivator, from clandestine home growers to commercial medical outfits and large-scale industrial operations, used traditional high-intensity discharge (HID) lights, either metal halide (MH) or high-pressure sodium (HPS), in their gardens.

Then things did start to change. We shifted from magnetic ballasts to the more efficient electronic and digital ones. Next came digital bulbs that were more compatible with the new technology. As this innovation continued, a plethora of new lighting options emerged, including light-emitting diode (LED) lamps, ceramic bulbs, double-ended bulbs, induction lamps and plasma lights. But which of these new lighting technologies are truly the best for horticultural use? As always, we turn to science for the answer.

Photobiology 101

Plants exist on the planet Earth because of a unique biological process known as photosynthesis, in which the sun's energy is captured by the plant and converted into the biochemical energy needed to power life. The sun's energy, as the visible radiation we call light, travels to the plant in the form of elementary particles known as photons. The plants absorb these subatomic particles through various pigments in their leaves. It is this energy that allows for the photochemical reaction known as photosynthesis to take place. In its most simplistic form, the equation for photosynthesis looks like this:

CO₂ + H₂O + photon energy = organic matter (glucose) + O₂

Glucose is the sugar or plant food created by the photosynthetic process. Without sunlight, plants—to say nothing of all life on Earth—would have never come into existence. So what does all of this mean for our indoor cannabis gardens?

Simply stated, it means that our indoor horticultural lighting should mimic, to the greatest extent possible, nature's own powerful source of light, which all plants—including cannabis—have evolved under for many millions of years. More specifically, the artificial light generated by grow lamps should provide the same photosynthetically active radiation (PAR) that sunlight does. Our traditional HID bulbs, which date back to the 1970s, did as well as the technology would permit in this regard.

However, in the past five years, major strides have been made in lighting technologies, and many new products offer varying spectrums for optimal plant growth and yields. Some even claim that these spectrums are better for our plants than the full-spectrum white light provided by the sun. How can we know which claims are valid, as well as how these varying spectrums will affect our gardens, before we drop buckets of money on new lighting gear? To answer these questions, we first need to look at the various spectral colors (also known as wavelengths or frequencies) to see just how much they contribute to the plant's photosynthetic processes, which directly affect its development, quality and yield.

90 Lighting Nutrition High Times October 2016

How Various Wavelengths Affect Photosynthesis

We probably all remember our good friend ROY G. BIV from grade-school science class: The acronym stands for "red, orange, yellow, green, blue, indigo, violet," the colors (or wavelengths) that comprise the visible spectrum of light.

Much research has been done on the effects of light at various wavelengths on plant growth. We know that different pigments within the plants utilize specific wavelengths, as measured in nanometers (nm), for different growth and development processes. In cannabis, these processes directly affect yield as well as cannabinoid and terpene production. Let's take a look at the benefits of different spectral wavelengths.

Ultraviolet Light (10 nm - 400 nm)

Overexposure to UV light is as dangerous for most flora as it is for humans. Still, small amounts of near-UV light can have beneficial effects for cannabis. In many cases, UV light is an important contributor to plant colors (pigments like purple or bright green) as well as tastes and aromas (terpenes). This is an indication of near-UV light's effects on metabolic processes. Research shows that 385 nm UV light promotes the accumulation of aromatic organic compounds and enhances the antioxidant activity of plant extracts, though it doesn't have any significant effect on the growth process itself.

In cannabis, the plant uses its trichomes (resin glands) to act as a sunscreen to protect against abnormal amounts of UV. Some growers have tried giving their plants greater amounts of UV light to cause them to produce more resin and thus increase potency. But while some increases in potency have been recorded using this method, most advanced growers don't advocate using "stress factors" like UV light to increase resin production.

Blue Light (400 nm - 520 nm)

The blue part of the spectrum, which for our purposes includes indigo and violet, enables photoreceptors in the plant called cryptochromes and phototropins to mediate its responses, including phototropic curvature, inhibition of elongated growth, chloroplast movement, stomatal opening and seedling-growth regulation. Blue light affects chlorophyll formation and photosynthetic processes and, through the cryptochrome and phytochrome system, raises the photomorphogenic response, which involves the plant's form and structure.

Blue wavelengths at around 450 nm encourage vegetative growth through the promotion of strong roots and intense photosynthesis, and they are often used as supplemental lighting for seedlings and young plants during the vegetative stage, especially when stretching must be reduced or eliminated. Blue wavelengths also carry the highest amount of photon energy of the spectral wavelengths.



This garden uses LED supplements with HPS to create broader spectrum.

Green Light (520 nm - 560 nm)

Contrary to popular belief, not all green light is reflected by the plants' chlorophyll. In fact, green light is often used as a tool for eliciting specific responses such as stomatal control, phototropism, photomorphogenic growth and environmental signaling. Combined with blue, red and far-red wavelengths, green light completes a comprehensive spectral treatment for the plant's physiological activity. Because it can penetrate further into the leaf than red or blue light, any additional green light in strong white (i.e., full-spectrum) lighting would increase leaf photosynthesis to a greater extent than additional red or blue light. Thus, the presence of green light serves to boost the plant's energy and yields, especially in bigger plants during the flowering stage.

Yellow/Orange Light (560 nm - 640 nm)

The 624 nm region has the highest photosynthetic relative quantum yield for a range of plants. At the same time, its action on redabsorbing phytochrome is considerably weaker compared with that of 660 nm red light, which means it can be used to balance the phytochrome equilibrium toward lower values (i.e., closer to those of daylight) than those achievable with 660 nm red light, especially when used with 730 nm far-red light, as discussed below.

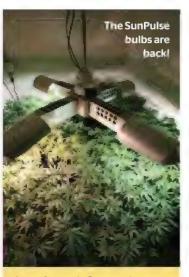
Red Light (640 nm - 700 nm)

Red light, the longest wavelength in PAR, affects phytochrome reversibility and is the most important for photosynthesis, flowering and fruiting regulation. These wavelengths encourage stem growth as well as chlorophyll, flowering and bud production. Several studies have demonstrated that plants showed the most growth in the vegetative phase under 650 nm light. Similarly, in the germination phase, 680 nm light spurs the greatest growth rate for freshly popped seeds.

The 660 nm wavelength has a very strong action on photosynthesis and also exhibits the highest action on red-absorbing phytochrome in regulating germination, flowering and other processes. Also, red light is very effective for extending the light cycle to prevent the flowering of short-day plants such as cannabis.

Far-Red Light (700+ nm)

Even though the 730 nm wavelength is outside the PAR range, it has the strongest action on the far-red absorbing form of phytochrome, converting it back to the red-absorbing form. Studies show that it is necessary for plants requiring relatively low values of the phytochrome photoequilibrium to flower; thus, far red can be used at the end of each light cycle to promote flowering in short-day plants.



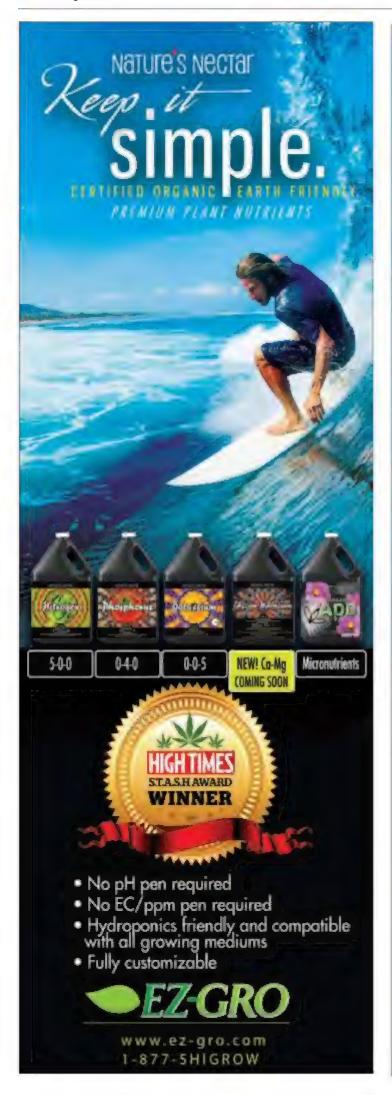
Artificial Sunshine

One of the more intriguing advancements in lighting technologies of the past few years is the unit shown here, originally produced by Life Light Technologies and is now manufactured by Garrison Technologies, Inc. The light spinners come in four arm units and spin to deliver light from multiple angles for superior light penetration into the plant canopy. The spinning system also cools the light itself and creates air movement within the growing space.

The real science, however, comes into play with the SunPulse bulbs, which come in four different Kelvin rated temperatures; each bulb produces a specific color of light. By adding a different bulb in each arm, the spinning action creates a full-spectrum, white light that comes the closest to that of natural sunlight out of all new lighting tech and has been unmatched since.

Additionally, the bulbs are true, digitally compatible bulbs that use advanced pulse start technology (made specifically for the new digital/ electronic ballasts) making them far more efficient than traditional HID bulbs. SunPulse created the first digital HID lamps for horticulture in the 1990's and designed one of the first matched lamp and e-ballast sets in the industry.

91





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Pigments & Light Absorption

One method for determining the spectralabsorption curves in plant photosynthesis (chart, top right) is to closely examine the pigments found in the leaves, which are directly involved in photosynthesis. Scientists can measure the rate at which these pigments absorb light and can even break down their absorption rates for each wavelength.

Leaf pigments such as chlorophyll generally reside within chloroplasts, which are subunits of plant cells. The chloroplasts' main role is to conduct photosynthesis, in which chlorophyll captures photon energy from sunlight, converts it and then stores it in ATP and NADPH (energy-storage molecules). They then use the ATP and NADPH to make organic molecules from carbon dioxide in a process known as the Calvin cycle. These organic molecules are the basis for the plant's food.

The pigments in the chloroplasts each absorb different wavelengths, and they absorb them at varying rates. As the photosynthetic process occurs throughout the leaf, various wavelengths of light are absorbed at different locations, providing different forms of light energy, much like a multivitamin provides a range of different minerals to help the human body create proteins and energy. Here's a look at the major pigments in plant leaves and the specific wavelengths they utilize most:

Chlorophyll-a. This is the most abundant pigment in plants. It absorbs light with wavelengths of 430 nm (blue) and 662 nm (red) and reflects green light, making plants appear green to humans.

Chlorophyll-b. This molecule has a structure similar to that of chlorophyll-a, and it absorbs lighter shades of red and blue (453 nm and 642 nm, maximally). It is not as abundant as chlorophyll-a and probably evolved

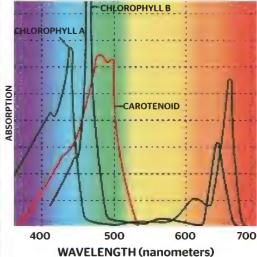
later. Chlorophyll-b increases the range of light that a plant can use for energy, absorbing some yellow and heavier orange shades as well.

Carotenoids. This is a class of accessory pigments that occur in all photosynthetic organisms. They are completely hydrophobic (fat-soluble) and exist in lipid membranes. Carotenoids absorb light maximally between 460 nm and 550 nm and appear orange or yellow to humans, as most of these wavelengths are reflected. Carotenoids can also absorb the green wavelengths reflected by both chlorophyll-a and -b.

Basic Conclusions

At the onset of this article, we asked which lighting technologies are truly the best for horticultural applications. In reviewing the science of the last several decades, we can come to some basic conclusions. We see that every color of the visible-light spectrum has a significant role to play in a plant's development. This includes the plant's structure, health, growth rate, yield and potency, as both cannabinoid and terpene production are dependent on optimal plant development.

Delving deeper to consider the role of the plant's pigments in using energy, we see that at every point along the way, these pigments are absorbing various wavelengths of light at different rates and in different places within the plant. Each pigment and wavelength makes a specific contribution to the overall process of creating sugars. In many respects, light serves as a multivitamin for plants, with each wavelength acting as a mineral that contributes a specific energy and function toward creating the plant's food. These are the processes that lead to better plant health,





which in turn increases yields and potency.

When we combine these facts with the simple notions of evolution and Mother Nature, it becomes quite clear that full-spectrum white light provides the best growth environment for plants. However, we also find a few surprises when we consider spectral absorption. First, green light isn't reflected nearly as much as people assume. Further, yellow and orange light has the lowest absorption rates of any of the visible wavelengths. This calls into question just how effective (and efficient) the more orange-hued HPS bulbs really are during flowering, but it also offers a strong argument for supplemental lighting during the flowering stage in order to achieve a fuller spectrum of white light.

In the end, we can always turn to science for the answers, but there is also the easy—and more obvious—solution: the outdoor classroom. All we need to do is study plants in their natural environs and take a look around. When we step outside and want to see what makes a 12-foot cannabis plant thrive, all we need to do is look up. **

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Step-by-step tutorial videos, white papers, elficacy reports and informative scientific articles allow any grower with an Internet connection to hone their skills and help produce their best harvest yet, free of charge.

Why Marijuana Growing Education Is a Top Priority for Advanced Nutrients

The medical marijuana industry is growing every minute. Legal marijuana is the fastest-growing industry in the U.S. and a slew of other businesses are jumping on the bandwagon as well. At present, 23 U.S. states allow medical marijuana use, while 7 have legislation pending to issue licenses for it.

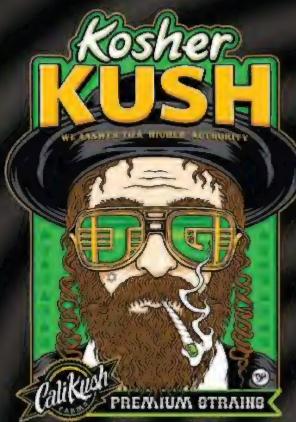
4 states and Washington, D.C. have legalized cannabis outright, while another California referendum in 2016 will allow recreational use in a state that was the first to permit medical marriuana use way back in 1996. It is estimated that medical marriuana is already a multibillion-dollar industry (without counting recreational sales)

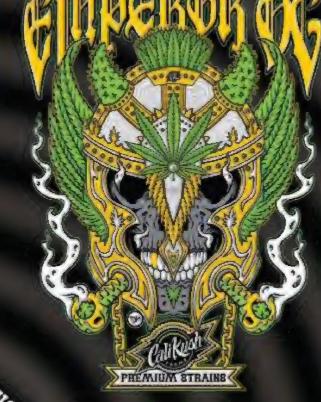
While a great deal of information and misinformation appears daily on the Internet, novices and more advanced growers alike are always looking for a source of reliable information which can serve to improve their yields, both in terms of quality and quantity. A whole community of growers inhabit the growers forums and are always looking to perfect their growing skills, without having to wade through hours and hours of irrelevant or misleading forum posts.

GMU is a bold step in a better direction, and by elevating the general level of education among growers, the quality of marijuana, especially as medicine, will skyrocket worldwide. This isn't just for connoisseurs, it's for children with epileosy, as well as adults suffering from the effects of chemotherapy, chronic pain, and glaucoma. Thousands of YouTube videos help document the impressive results of therapeutic cannabis use.

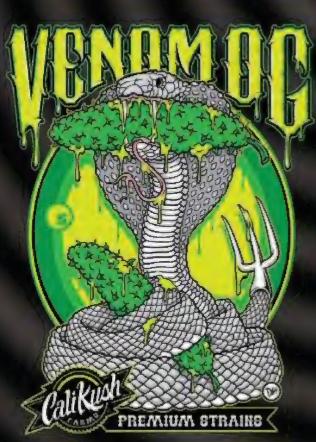
Grow Med University is a course representing the cumulative experience of scores of the most competitive growing experts. From day one, it was envisioned as a community-driven resource, providing much needed knowledge to the medical-marijuana community. If you have a passion for hydroponics and growing marijuana to help patients get rid of illness and pain, then Grow Med University is for you.

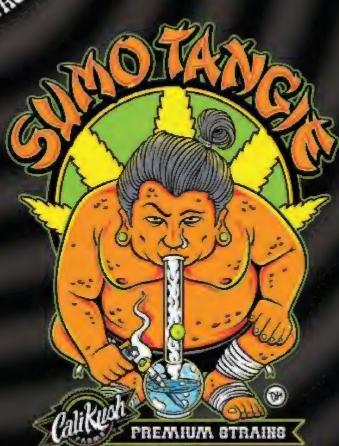
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98 Summer Magic in Michigan









included medicated cotton candy from Sweet Stone, Nacho Kief Queso from Krispy Kief, and a hotly debated rolling contest: Six speedy competitors vied for the title of Fastest Joint Rolled, and the packed crowd was given the task of judging which one burned best. And, of course, the 4:20 smoke-out enveloped the whole lounge in a sweet, skunky haze as the heat of the day began to break.

HT edibles editor Elise McDonough presented her ever-popular seminar "The Best Cannabutter: Ways to Create Potent Results," while chief cannabis officer Nico Escondido discussed light, nature and technology in his "Illumination" presentation. HT senior cultivation editor Danny Danko moderated a panel of growers at his packed seminar on cultivation. And the "Veterans and Cannabis" panel was of great interest to the crowd of patients and med-pot activists.

Late Saturday afternoon, rock icon and activist Melissa Etheridge sat down with High Times for an illuminating Q&A in the seminar tent before taking the stage to perform. Etheridge had much to say about her love for the herb, the importance of cannabis activism, and why she believes middle-aged women are at the forefront of the marijuana movement. The attentive crowd hollered when she was presented with a couple of joints that she promised to spark up at her show—which she did that night, proudly puffing and proclaiming, "This is the first time I've smoked onstage!"

Etheridge's killer one-woman set came to a close as the sky began to darken, the backdrop of trees black against the purple sunset, fireflies winking green in the grass. And then the fireworks went off! A huge show of blazing pinwheels, streamers and flares lit up the sky above Clio, signaling the end of a perfect early-summer day spent at the High Times Cannabis Cup.



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Sunday dawned slightly cooler, and the perfect blue of the sky seemed just made for cannabis lovers. Smiles abounded as attendees mingled on the racetrack to share the contents of their shopping bags and burn one down together. Jars of kind nugs were cracked open, sniffed, admired and exchanged. One jolly soul I spotted was carrying a tiny clone in a red Solo cup, his tie-dyed bulk belying the delicacy of the little green shoot in soil. It lifted my heart, and he grinned when I asked if I could snap a pic.

As the day waned and the happy, tired crowd made their way to shaded lounge chairs and picnic tables to do one last dab, they were treated to a startlingly beautiful set by Tunde Olaniran, a multitalented vocalist and artist from Flint, MI. Then a sleek black tour bus pulled onto the speedway, drawing a few glances and whispers: "Must be B.o.B!" The legendary rapper had indeed made a detour to host the Cannabis Cup awards show that evening, but little did folks realize that he was about to present an unannounced mini-set. B.o.B bounded out onstage and wowed the crowd for 20 minutes, introduced the awards, and then hit the road once more to continue his summer tour.

We'll see you again in San Bernardino, Bobby Ray! And for all the folks in Michigan who made us feel at home, we can't wait to come back in August. Michigan again and again and again! *







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2nd Place Dark Chocolate Boysenberry Crunch by Cannabinoid Creations
3rd Place Honey Roasted Peanut Brittle

CBD Delight by Arborside Delights

BEST EDIBLE

1st Place Chrondiments Salsa by SweetStone Candy 2nd Place Chocolate Truffles by Chocabis 3rd Place Captain Kirk's Key Lime Cheesecake by Captain Kirk's Edibles of DepotTown Alternative Health

BEST TOPICAL

1st Place Michigan Organic Rub Extra Relief Vanilla Mint by Herbal Solutions 2nd Place Luscious Lemondrop Lotion by SweetStone Candy 3rd Place Budsuds Purple Haze Topical Soap Bar by Budsuds

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1st Place Puffco 2nd Place Wild Bill's Tobacco 3rd Place Ooze 420

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1st Place - Herbal Solutions
2nd Place Advanced Nutrients
3rd Place EZ Squeeze - Rosin Press

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3rd Place Advanced Nutrients





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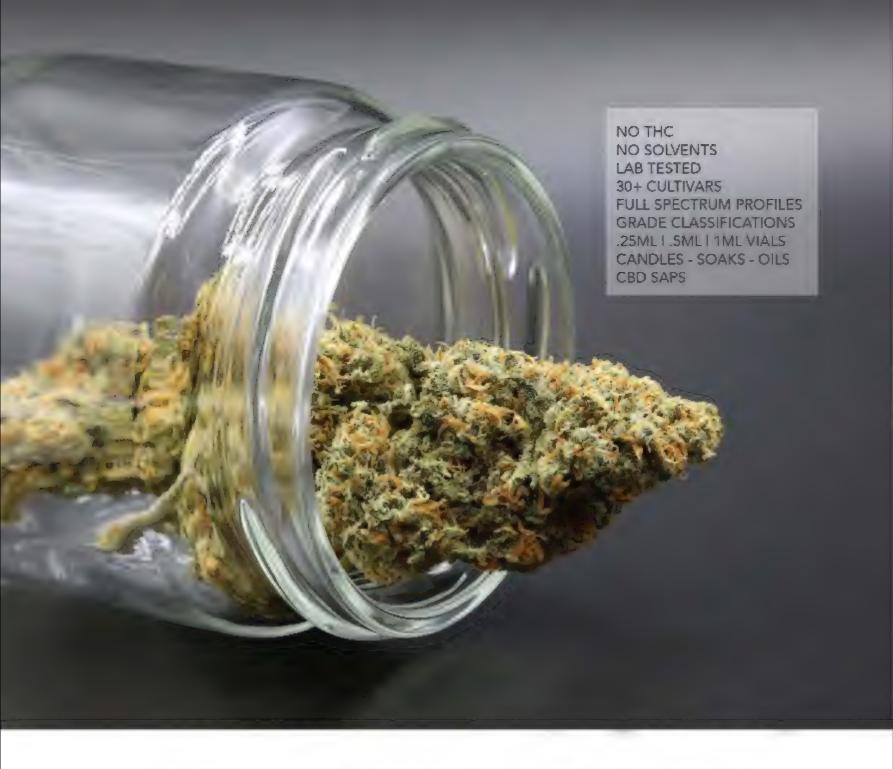
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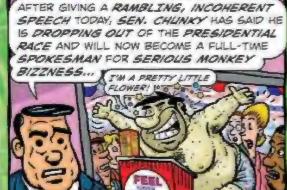


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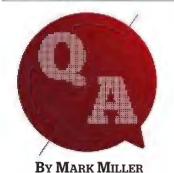
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THE HIGH TIMES INTERVIEW

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DEAD AND WAITING FOR
BILL KREUTZMANN TO CALL.

A FOUNDING MEMBER OF THE DEAD, KREUTZMANN ANCHORED THE LEGEND-ARY BAND'S DRUMMING, BOTH SOLO AND IN TANDEM (AS THE "RHYTHM DEVILS") WITH MICKEY HART. IT WAS BACK IN 1965 THAT KREUTZMANN FIRST HOOKED UP WITH JERRY GARCIA, PHIL LESH, BOB WEIR AND RON "PIGPEN" MCKERNAN. TOGETHER, THEY STARTED THE GROUP THAT WOULD MORPH INTO THE DEAD, SOON SERVING AS THE HOUSE BAND FOR AUTHOR/LSD AVATAR KEN KESEY AND THE MERRY PRANKSTERS' GROUNDBREAKING ACID TESTS.

The Dead would go on to enjoy a rich 30-year run, producing both live experimentation and classic songs that stand the test of eternity. Since the death of Garcia in 1995 and the inevitable break-up of the band, Bill has spent the last 20 years carrying on the Dead's prodigious legacy—and occasionally growing some good outdoor bud. He's also collaborated with neo-jambands like the Disco Biscuits and, in tandem with Biscuits keyboardist Aron Magner, has created a more 21st-century approach to the Dead's music with Billy & the Kids.

In 2015, Kreutzmann and his fellow surviving bandmates grabbed the spotlight again with their 50th-anniversary tribute series "Fare Thee Well," which led in turn to his current combo, Dead & Company. Having just marked his 70th birthday before going out on yet another tour, Bill phoned HT to discuss his illustrious past, present and future, imparting many life lessons along the way—especially to avoid eating fast-food chicken while blazing on acid!



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Hi, Bill! I'm listening to 8/17/72, "The Other One," with your drum solo.

Oh, good... '72, that was a great year for us.

Happy belated birthday! How are you doing?

It kind of feels like I have a new life going on, with a new band [Dead & Company]... and I'm living with my wife Aimee in San Francisco more than I am in Hawaii because I'm playing more music now. It's good.

What did you find most fulfilling about "Fare Thee Well" and the Dead's 50th anniversary?

I really liked having all the Deadheads get together for a giant event; it was really amazing to see all that love in one place. It just reminded me how important Deadheads and the culture really are in life, and to celebrate it. I'm not going to say the Grateful Dead *created* that culture, but we certainly were a part of it.

What's the difference between playing behind Trey Anastasio at "Fare Thee Well" and John Mayer with Dead & Company?

They both know the Grateful Dead's music so well from their hearts, and because each guitarist is different, they take the music that exists and then play it at an even higher level with their own personality.

How do you respond to criticism from a certain faction of Deadheads who perceived "Fare Thee Well" as the Dead's final shows, and then criticized the later formation of Dead & Company?

I want to keep playing music. Having John come into the band made it a really good thing to do, to play music at this level. Some people said it was a "money grab," but that's total BS. It's playing music for the love of music.

I'm not going to pass on the opportunity to play with these musicians, who keep the music alive as well as



"It was my birthday, and I smoked everything I wanted... I had a good birthday party."

any group. Dead & Company rehearsed for over a month before our first tour, and we're starting up this coming Monday [May 16] for another few weeks of rehearsal before we go out on tour again.

Part of that tour warm-up included a free show at San Francisco's Fillmore, which we were lucky enough to attend. Dead & Company performed classics like "Dark Star," and the band genuinely seemed to enjoy themselves onstage.

Right on. That's the beauty of it—keeping the music alive in the right way, with joy and happiness. We look at each other and smile a lot when we play. And we also close our eyes and get *real* deep.

You have the camaraderie, yet you can each go into your individual space.

Absolutely.

With Billy & the Kids, you're the only drummer. Is it easier or harder playing alone?

It's not easier *or* harder—just completely different.
When I'm playing with Billy & the Kids, I play much fuller, because there's more space there; I'm by myself, so I don't

have to tie up with another drummer trying to accomplish that giant, monster twodrummer thing. When I play by myself, I can play more open, freer, and the music is different.

Now when there are two drummers, I have to concentrate and listen to Mickey—I have to really, really lock in with him to become this four-armed, four-legged drum monster. That only works when you have two people doing it right; then you can become this giant drum machine. One drummer can't do that... not really [laughs].

What goes into the Rhythm Devils' creation of the "Drums" section of the concerts?

We come up with a theme for the night for inspiration, like "End of the World"—
I'll use that one as an example, since Donald Trump is running for president [laughs]. Mickey has some various recorded music that we rotate and use like "rhythmic carpets" that we can play anything on from show to show.

What's the best drug for playing drums?

Without a doubt, it's cannabis. Physically playing drums on acid is a whole different thing. Marijuana is the best for playing because it keeps you relaxed. People think a drummer is better if he's "stimulated." But that's not true—just the opposite. During the day, if I have a long rehearsal session, I'll vape with cannabis with lower THC-only 20 percent-and higher on the CBD content, which allows me to warm up much faster. A lot of people don't know that cannabis improves your circulation.

Do you favor *indica* or *sativa* strains?

I like them all, except that really strong, pure *indica* is too heavy for me—I'm speechless or I'll go to sleep on you. So I use hybrids. And then I love pure strains of *sativa* that get your mind going... I love that the best.

Preferred method of smoking?

I use vaporizer pens. I love these pens, all the different varieties. There's nothing that beats the smell, the terpenes, the flavor and the high from smoking flowers, but unfortunately [combustion] is a bit hard on my lungs after a while. It was my birthday last Saturday [May 7], and I smoked everything I wanted, and there are roaches all over the house [laughs]. I had a good birthday party.

How about some ganja-growing tips from a member of the Grateful Dead?

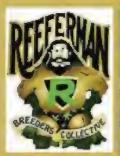
I've grown for a couple of years now, except this very last year because I've been playing with Dead & Company. I've never grown indoor, only outdoor. Growing in Hawaii is tricky, because the longest day is only 13 hours. So if you don't have the lights on when you first put your plants in the vegetation stage, they immediately turn to buds, and you end up with these 2-foot plants—that's



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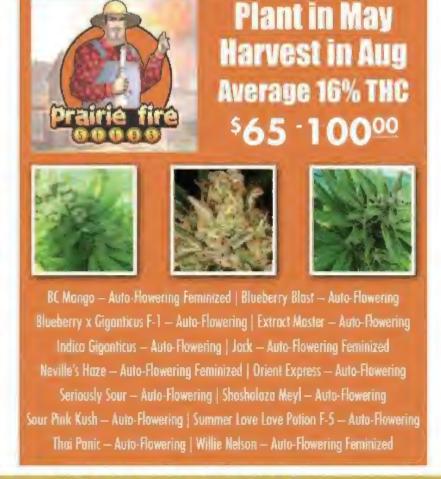
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all you get. So the first month I use lights so the buds get fat and juicy, and when the days get closer to 13 hours and the plants look right, I take down the lights—depending on an individual plant's needs—and that works okay.

Also, at the end of the season when it's time to harvest, there are torrential downpours that can just knock everything off the plants—so you have to put a plastic cover over them. And in Hawaii, you have to put numbers over your greenhouse for the police helicopters. That's still a "cop thing." What other medicines do you have to do that for? Not for gout medicine [laughs].

How about your finished product?

I was satisfied. I didn't have any serious mold problems; I checked every morning real early, and if I saw anything funny, I got it off the plant right away. I grow completely organic—no insecticides or herbicides whatsoever. I wanted to use neem cake—organic fertilizer—but it just stinks. It tastes poorly, and I wouldn't do that to a pot plant.

It turns out that one of your children has an interesting cannabis connection?

My daughter Isabella just graduated from college with a BS in biology, and her main focus was on cannabis-studying the genetics so you can find out the parents of a particular strain, which I'm fascinated by. Now she works at SC Labs in Santa Cruz testing cannabis plants and products for chemicals and pathogens. Here I am, the drummer of the Dead, and my daughter is researching cannabis. It's a nice thing.



"We dropped the acid... And that was when we heard the flying saucer land."

You graciously allotted extra time for this interview because you're such a big fan of *High Times!* What do you like so much about us?

I started reading the magazine because it gave me so much information about something I'm really interested in. It's taught me how to do things like make cannabis oil. I like the pictures, and I *love* to see the flowers. When I was growing, I tried to make my flowers look like those in *HT*—but I never have.

What lessons did you personally extract from the Acid Tests?

That it was okay to be free and loose, to be yourself and have a really good time. You didn't have to take playing music as seriously as you thought. When you're part of it, high on acid, it's the straight people on the street that freak you out. I actually tested that once—check this out: At one of the Acid Tests, I decided to find out what it would be like if I didn't drop.

And I got higher than *any-thing*—I really did. It was interesting.

How did acid change you as a person?

It changed me a lot. Up until my first acid trip, I'd always had a hunch that there was more out there than met the eye. And when I took acid, it was like a pat on the back: "Yeah, see? You were right! Come in, join in ... it's a *lot* more fun." So I ended up partaking in this far-out world.

I'm trying to think of some corny metaphor to describe my first trip, like comparing it to your first kiss—but it's so much bigger than all that.

Share a classic acid trip that the Grateful Dead took together.

It was at Tilden Park in Berkeley, back in the '60s. And we were hungry before we were going to drop, so we got a tub of Kentucky Fried Chicken and proceeded up to the [Berkeley] Hills, and we dropped the acid with our big bucket of chicken. And that was when we all heard the flying saucer land—

"Heard"?

Yeah, there's nothing that sounds like a flying saucer. It was behind the hill; we all heard the sound, but we couldn't quite get there in time to see it. Meanwhile, when you're high on acid, you can't tell if the chicken has been eaten or not. And you don't want to litter, so you're putting the drumstick bone back into the [KFC tub]. And then you're looking in there, trying to figure out if that drumstick was eaten or not, 'cause they were all crawling around in there pretty good.

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Finger-trippin' good!

Yeah.

Did the Dead ever indulge in designer drugs like MDMA?

We never did Ecstasy as a band—that might have been fun. But I'd warn anyone reading this off of designer drugs. One reason I have a strong feeling about that is Owsley-who made some of the purest acid ever-was trying to make STP [a synthetic hallucinogen], but he didn't know [the potency] of the doses, so he asked me to try it. And I said, "Sure, I'll try it!" ... and it kept me up for 72 hours! It was hallucinatory; I laughed the whole time and saw funny visuals. But STP never hit; it never became very popular.

What was it like to drop Owsley's LSD back in the day?

I'm sure Owsley had his personality on the acid a little bit, though it wasn't as pure as Sandoz's [the Swiss pharmaceutical company], because he made it unique to himself. But it was still wonderful. We stopped getting Sandoz, so he became the source where we could get reliable acid.

Today, we have a terrible problem: We don't know where to get acid any more!

It's not even on Shakedown Street [the famed parking-lot scene at Grateful Dead concerts] like it used to be.

No, it's gone. I'm going to volunteer if I have to, be a subject [for LSD testing]. Find Dr. Feelgreat [laughs].

The Dead's final tour in the summer of 1995 was a perilous expedition, from fan riots to far-right death threats against Jerry. Do you think it was a coincidence that the band's demise was nigh?

No-but I don't really believe in coincidences anyway. I would say that we saw it coming. But it wasn't because we were more popular; it was because more

radical stuff was going on out there in the audience world, the people world. It got pretty awful out there.

Jerry Garcia died-of heart failure-exactly one month after that last tour ended. You were already back in Hawaii. How did you handle that fateful day, August 9, 1995?

After Jerry died, I felt lost everywhere-I didn't know which direction to turn. I just grabbed a board and got out on the ocean to surf. You couldn't see me crying because of the water. I've never been so lost... but I know he's happy I'm still playing music.

Everything in life is temporary, and you got 30 years playing with Jerry.

Even more ridiculous: How many bands stay together that long?

What's the most crucial thing about the Grateful Dead's legacy?

That we're still popular on the societal level. The important thing is to be popular in the long run.

You've seen so many comrades fall, and now you're playing in another band with the word "Dead" in the title. What's your take on the afterlife?

I'm coming back as a salamander.

It's a fitting choice for a reincarnation vessel, given the salamander's use as a natural hallucinogen. But that's Bill Kreutzmann for you-still hoping to turn people on, even in his next life! 🐇

Bill's candid 2015 autobiography, Deal: My Three Decades of Drumming, Dreams, and Drugs With the Grateful Dead, served as an invaluable resource for this article. Special thanks to Bill's wife, Aimee Sharp, for arranging the interview.





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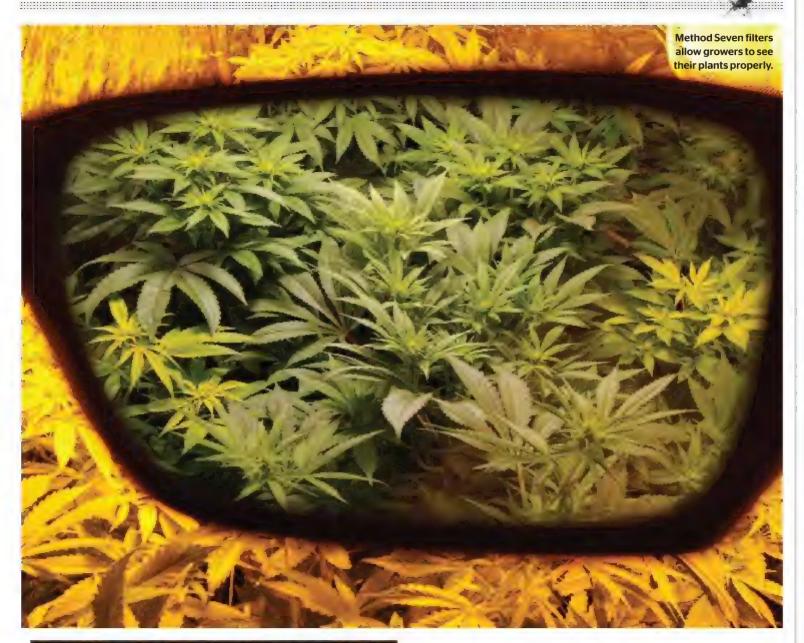
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Send your cannabis cultivation questions to @deardanko or deardanko@hightimes.com



SUBJECT: Grower Eye Care

FROM: Beggarstune

I have a new grow tent with a 1,000-watt light. The inside of the tent is very reflective, and working in it—even for a short period of time—leaves me seeing spots if not feeling quite blind when I return back to normal lighting conditions. I'm concerned about my eyesight. Do you have any advice on protecting your eyes from intense indoor grow lights?

Dear Beggarstune,

Luckily, there are several types of growroom eyewear on the market that will protect your vision from annoying or potentially harmful rays. Brand names like Nectar, Lumii and Apollo all provide a variety of affordable options, but my favorite company making eyewear specifically for protecting against high-intensity discharge (HID) lights, as well as LEDs and even sunlight, is Method Seven.

Method Seven glasses were developed by our friend and High Times colleague Jeff Goldberg, who sadly passed away last year. As a professional cannabis photographer, Jeff recognized the need for protective lenses for people who spend a lot of time under artificial lighting. Using the technology he implemented for shooting photos under intense light, Jeff helped to develop Method Seven lenses to "white-balance" a wide variety of different indoor spectrums, and these products remain at the forefront of growroom eyewear tech. No matter what lighting you use in your grow, get yourself a pair of glasses—or some clip-ons for your existing lenses—in order to protect your precious eyesight.

Danko Tip: Savvy cultivators build a pulley system to easily lower and raise their grow lights as needed.



SUBJECT: Repotting Root-Bound Plants FROM: Michael R.

I'm totally new at growing. I have a few indica seeds, five in all, and wonder if I should grow them the entire time in a 5-gallon bucket, or should I start small and keep repotting them as they get bigger? I know repotting can be a little tricky. Is a 5-gallon bucket too large? Is a smaller bucket or planter okay?

Dear Michael,

I believe in growing plants in the same container for the duration of their life cycle instead of starting with smaller containers and then repotting them as they grow bigger. That's because I believe the taproot seeks out the confines of any

given container and then sends messages (via hormones called auxins) back to the plant to let it know if space is limited. The plant then responds by restricting its growth aboveground in order to adapt to the size of its container.

It's perfectly okay to start your plants in plugs or small cups, but as soon as you see the roots getting close to the bottom of the medium, transplant them into the containers you'll be using until harvest. If you're using 5-gallon buckets, I recommend giving them a vegetative time of five to seven weeks before you induce flowering. The roots will have plenty of room to breathe and absorb water and nutrients, without becoming so rootbound that they struggle to compete with each other for resources.

SUBJECT: Pruning Auto-Flowering Strains FROM: Jim P.

I have a two-part question. To learn some of the ins and outs of cultivating marijuana, I've started by growing auto-flowering Northern Lights, and I just recently harvested my first two plants. When these plants were seedlings, I pinched one of them in the center and left the other one alone. Lo and behold, the pinched plant produced almost twice the amount of flowers as the unpinched one. I've read that auto-flowering plants don't take well to this technique, but my results show the opposite. I now have three new seedlings of Northern Lights and would like your thoughts on the pros and cons of training auto-flowering plants.

Dear Jim,

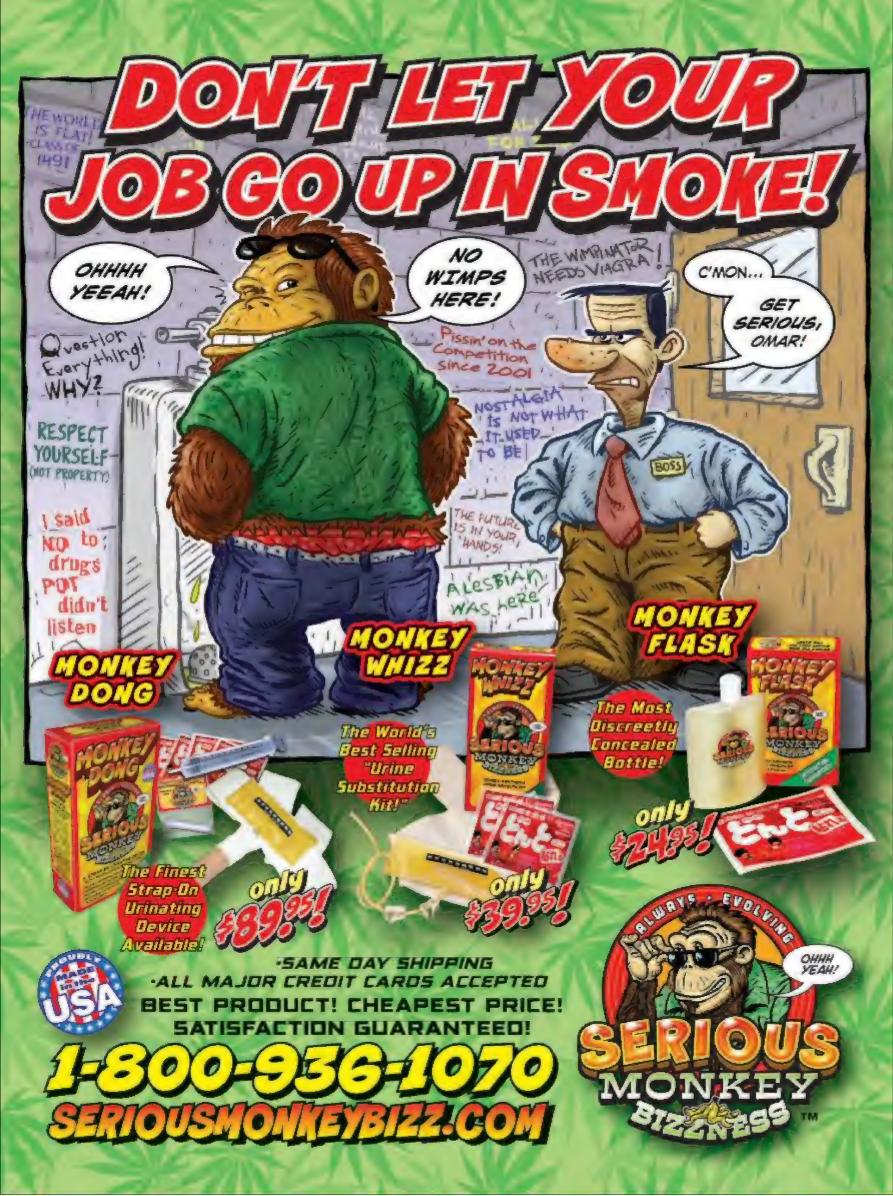
It's true that I don't normally recommend any kind of pruning if you're growing auto-flowering plants. That's because the growth cycle is so short for autos that most growers will end up reducing their harvests if they prune the plants improperly or at the wrong time.

An expert grower, however, can selectively prune an auto-flowering plant and end up with a bigger yield. This means timing the pruning for very early in the plant's life—sometime after the second set of regular leaves has appeared, yet before the fourth or fifth set emerges. Pinching off a top during this crucial (and short) period of time will result in a bigger harvest, but each strain will react differently, so get to know the kind you're growing and act accordingly.

SUBJECT: **Below the Equator** FROM: **Max**

I'm sure you know this, but maybe some people in the Southern Hemisphere don't. You've said a couple of times that if you're growing with sunlight, you should find a southern-facing window or hill to get the most sun. However, in the Southern Hemisphere, you need to grow on the north side! No worries from me—I live in North America—but I just wanted to point it out for any homies below the equator who didn't think about that.

Dear Max, Thanks for the tip! Of course you're 100



percent right, and I apologize for not being more specific in my instructions. Outdoor and greenhouse growers north of the equator should look for southern-facing hills, while growers south of the equator should grow on hills that face north. This way, you'll experience the full potential of the sunlight in your particular region.

Danko Tip: Never, ever use any form of flammable or explosive

solvent-butane alcohol etc-indoors



SUBJECT: Clones From Flowering Plants

FROM: Invictus Grower

My crop is currently in the vegetative stage, and it's getting close to the time for taking clones. I've always read that clones should be taken from a mother plant while it's still in veg. But I just stumbled across a technique called "monster-cropping," which is basically taking a clone from an already budding plant in the first few weeks of flower and reverting it back to veg. My question is: Which technique is best? I've done some research on monster-cropping, but there doesn't seem to be a definitive answer.

My second question is this: If monster-cropping *is* best, is it better to cut the small popcorn buds off and make it look like a veg clone, or is it better to leave the small buds on? I've seen videos of both techniques, and when the buds are left on and the plant reverts to veg, the bud sites grow a crazy amount of branches.

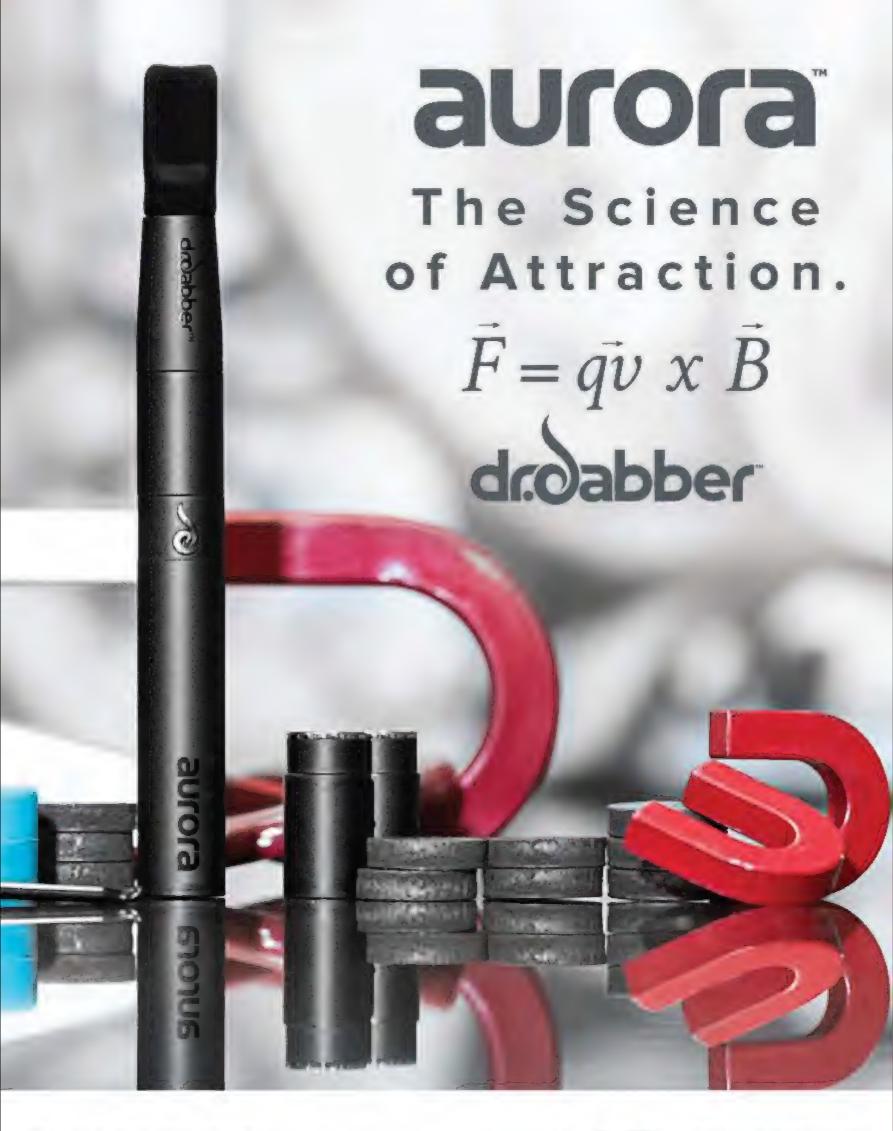
I would love to hear your thoughts on traditional cloning versus monster-cropping.

Dear Invictus,

I don't advise taking clones from flowering plants. The extra time it takes to revert them back to the vegetative stage, as well as the potential to stress the plant out and cause it to react with strange behaviors such as hermaphroditism or whorled phylotaxy, aren't worth the added trouble. The healthiest cuttings come from strong and healthy plants in the vegetative stage, so that's when you should be taking your clones.

The only time I'd recommend taking a cutting from a flowering plant is when the genetics might be lost. Say you've found a unique, amazing flowering plant and want to keep it around. In that case, take a clone, root it, and place it under 18 to 20 hours of light per day. Eventually, it will revert back to its vegetative stage, allowing you to preserve its genetics for future use.









120 Dear Danko

High Times October 2016

Danko Tip: Pumps placed outside a hydroponic reservoir will not generate enough heat to warm the nutrient solution to unhealthy temperatures.

SUBJECT: Genetic Drift

FROM David in GA

How long can I keep a mother plant for clones until it should be flowered out to finish its life cycle? And how many times can I make a clone of a clone of a clone of a clone before it starts to lose its zip and may turn hermaphrodite? Also, are regular seeds better for this than feminized ones?

Thanks for all you do to change the laws in this country. I've always loved that Ben Franklin quote: "Nothing is more American than breaking an unjust law." I'm a disabled 47-year-old veteran whose spine was rebuilt with 16 pieces of titanium and cadaver bones, but I can't afford—nor am I physically able—to move from Georgia across the country to a state that cares for its neighbors. I am not a criminal!

Dear David,

Thank you so much for your service! It's truly a shame that our country still denies marijuana to veterans: Surely cannabis is safer than war? So many vets have told me that medical marijuana has allowed them to eliminate prescription drugs or alcohol from their lives. Many who were once suicidal have told me that cannabis is responsible for them being alive today. We owe them—and you—more than just platitudes.

As for the question of how long mother plants can stay vibrant and produce strong clones, it's really up to you. As long as the plants are kept healthy, there's no real limit to how long they can live and produce cuttings. Even when a clone is taken from another clone, each subsequent clone should have the exact same genetic potential as the first.

Some may tell you that plants are affected by "genetic drift" and will deteriorate over time, but I believe those plants actually suffer from "environmental drift." Think about it: The DNA of the plant can't change, but its environment and health are entirely up to the grower. It's the old nature-versus-nurture argument: Healthy plants will provide healthy cuttings, while stressed or diseased plants will provide weak and sickly ones.

SUBJECT: CBD and THC

FROM **Enrico A.**

I'm about to grow the CBD Therapy strain from the CBD Crew, and I was wondering if I should grow it in the same room as my high-THC strains? Will they affect the high-CBD plant in any way, or perhaps it won't matter?

Dear Enrico,

You've chosen a great strain from a wonderful group of people! There's no reason you can't grow your high-CBD strain next to your high-THC varieties, since there's no chance of cross-pollination or any way to contaminate CBD with THC from different plants growing in the same space. The only thing you need to consider are the actual growing characteristics of the different plants to ensure that they're compatible. In terms of minimizing complications, you don't want to grow a fast-flowering, short and stocky *indica*-dominant plant in the same space as a bunch of longer-flowering, thin and stretchy *sativa*-dominant ones. **



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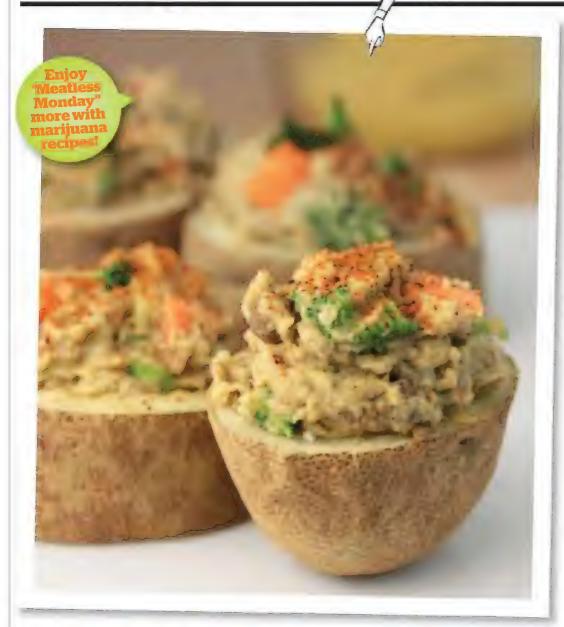
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Deviled Lentils

Designed for vegan stoners, this simple recipe will surely please anyone with the munchies.

- By Elise McDonough

You don't have to be a devout vegan to enjoy plant-based cooking a few days out of the week. If you're seeking a healthy habit, join in on "meatless Monday" and go vegan for a few meals per week to add some balance to your life. After all, cannabis makes all food taste amazing, vegetables included!

Straight outta Portlandia, the vegan stoners behind *theveganstoner.com* adorably illustrate recipes designed to quickly satisfy the munchies with healthy, delicious dishes.

Created by Sarah Conrique and Graham I. Haynes, designers who believe that vegan cuisine shouldn't be too complicated or rely on expensive, exotic ingredients, *The Vegan Stoner Cookbook* is perfect for those just beginning to cook.

With few ingredients and minimal time and effort required, each vegan stoner recipe makes it easy for slackers to embrace an eco-friendly lifestyle, reduce their carbon footprint and get fit in the process. Inventive recipes utilize the microwave, along with plenty of frozen or canned ingredients, making this diet economical as well, a boon to all those busy vegan stoners in college or just starting out in the world.

These Deviled Lentils mimic deviled eggs, making a fun contribution to a potluck or party. Using a few affordable pantry ingredients, you can bring creativity to the table by challenging yourself to invent new dishes each time you get high!

¼ cup dry lentils
1 Russet potato
1 tbsp. "veganaise" soy-based mayo substitute
2 tbsp. stone-ground mustard
1 tsp. Creole seasoning
2 tbsp. cannabis-infused olive oil
½ cup frozen vegetables

Cook ¼ cup of dry lentils in about ¾ cup of water (according to package directions).

Slice a potato into four pieces, cover with a wet paper towel, and microwave till soft (about six min). Scoop out a hole in middle of each potato piece.

Mash cooked lentils with the scooped out potato, a spoonful of veganaise, a spoonful of mustard, a few sprinklings of Creole seasoning, and two spoonfuls of herb oil.

Microwave a handful of frozen veggies according to package and stir into lentil mixture.

Scoop mixture into potato holes. Munch. <u>*</u>



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Intended for hikers, bikers, surfers and those with active lifestyles, Outset cannabis-infused dried fruits contain 5 mg. of THC per serving and 100 mg. per bag. Apple, banana and pineapple crisps are raw, vegan and made with all organic ingredients. Perfect for unwinding on a camping trip or after a strenuous yoga class, these edibles provide nutritious medication without the added sugar, fat and calories found in some edibles. *outsetedibles.com*

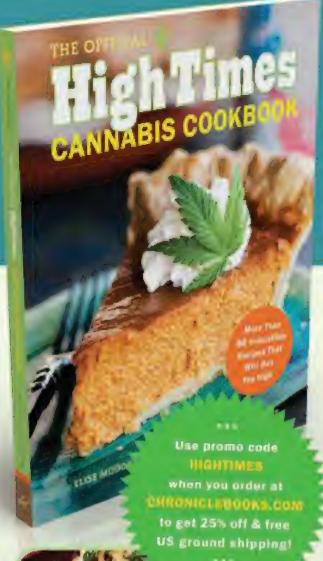


Pot of Tea

Sipping sensi with cannabis-infused tea.

Relax and unwind with a cup of tea that includes cannabisinfused coconut oil along with a healing synergy of other herbs. Available in a THC-infused Calendula Guava Mango Black Tea that recently won a first-place prize in the Edibles category at the High Times So-Cal Cannabis Cup, this tea is wonderful when paired with Honey Pot 420 honey. A CBD-only version uses chamomile, mint and lavender for a wonderful sleep aid. *honeypotbear420.com*





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Do people drink less alcohol when marijuana laws are less strict?

Bud Smarter

Hi Bud,

Research on marijuana-law reform and alcohol consumption has yielded almost every result possible. At least one study showed that medical cannabis states have seen a decrease in alcohol consumption, while another revealed that many medical users have turned to the plant to curb problematic drinking. But other work shows no impact at all or even an increase in alcohol-related problems. Some of these results seem to depend on how the laws are enforced as well as the age of the participants. I think we need more states to legalize before we can get a clearer answer to this question.

Can cannabis treat Alzheimer's disease?

Dr. Demento

Hello Doc, The plant's legendary antiinflammatory and antioxidant effects make it an ideal candidate for preventing some aspects of the disease, but we haven't seen it work as a real cure in humans. At least 10 medical marijuana states permit the use of cannabis for "agitation due to Alzheimer's disease," but few medical users report this symptom. We have good data showing that THC can help folks with dementia avoid causing a ruckus or stressing out their caregivers, and it also helps them to keep their weight on better. If you ever see me in an old folks' home, please bring along a brownie!

What's the deal with alcohol, cannabis and safer sex?

Rainn Coates

Yo R.C.,

This research can get a little sticky. Those who drink more alcohol or use more cannabis are also more likely to have sex with a new or casual partner. Even so, they're no less likely to use protection. **

Dr. Mitch Earleywine, PhD, is the author of Understanding Marijuana and The Parents' Guide to Marijuana.



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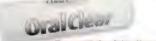
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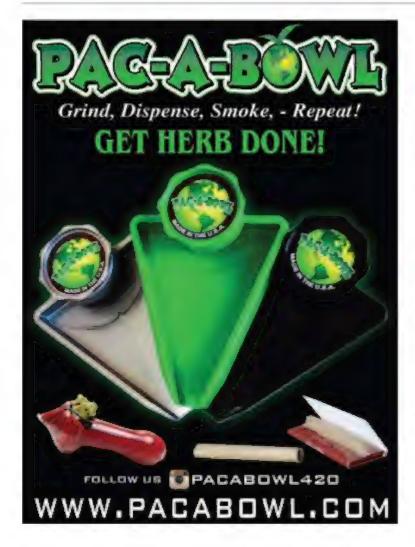
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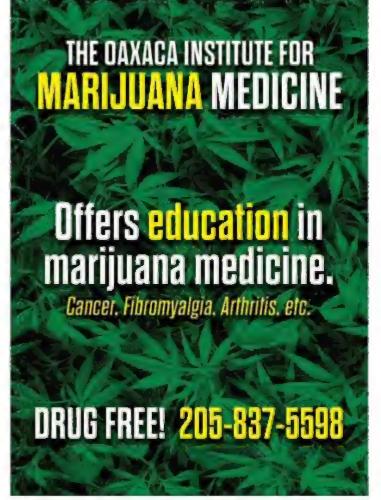
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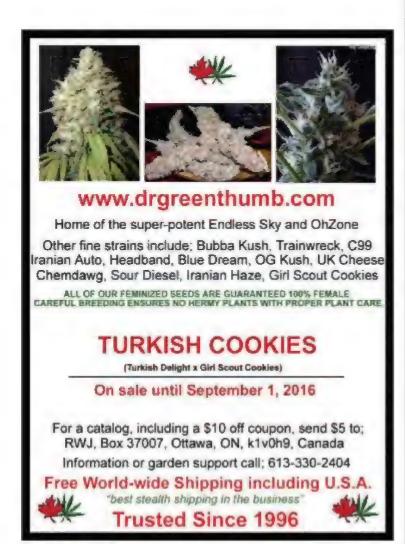


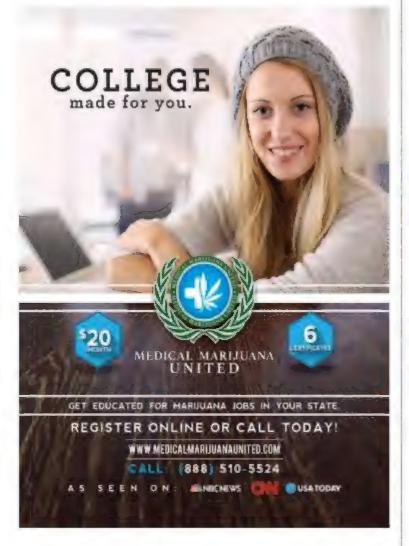
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Dabs, Dabs and More Dabs!

A brief review of the incredible advances in concentrate styles spawned by the nouveau dab craze. *By Craig Coffey*

trates are the fastest-growing sector of the cannabis market. After all, who doesn't love a good dab? Concentrates capture everything that's great about weed and amplify it to unprecedented levels. And when you consider how quickly concentrates have become such an integral part of the marijuana market, it's a truly extraordinary rise.

Less than 10 years ago, hardly anyone had even seen a dab rig, and even fewer people had access to honey oil, the solvent hash of the day. It took a perfect storm of less restrictive marijuana laws—which led to a huge surplus of cannabis being sold at an all-time-low price per pound—combined with new platforms for sharing information, to create the explosion of experimentation and progress we've seen in the concentrates field.

Here are some of the different dab styles that hash makers have brought into existence over just the past few years:



Wax: In this form, the hash can sometimes resemble a honeycomb. It will usually crumble

to a coarse powder if you roll it between your fingers. This style of hash contains plant waxes that give the sample its structure.



Shatter: True shatter is hash that has had the plant-wax content removed, usually through a

process called "winterization."
Basically, after you dissolve THC into your solvent, you bring the saturated solvent down to an extremely cold temperature.
All of the plant wax in the solution clumps together; the solution is then filtered to remove the

frozen wax content, and the solvent is evaporated. The hash from this process is very stable, and it's usually hard and can shatter like glass. Shatter tends to have a higher THC concentration.



Snap and pull: This type of hash usually looks hard and shatter-like but is actually more like

taffy. It often takes a quick snap of the wrist to pull a dab off your parchment paper, which is probably why it's called "snap and pull." This type of hash tends to hold onto terpenes very efficiently and generally has a higher terp concentration than other varieties.



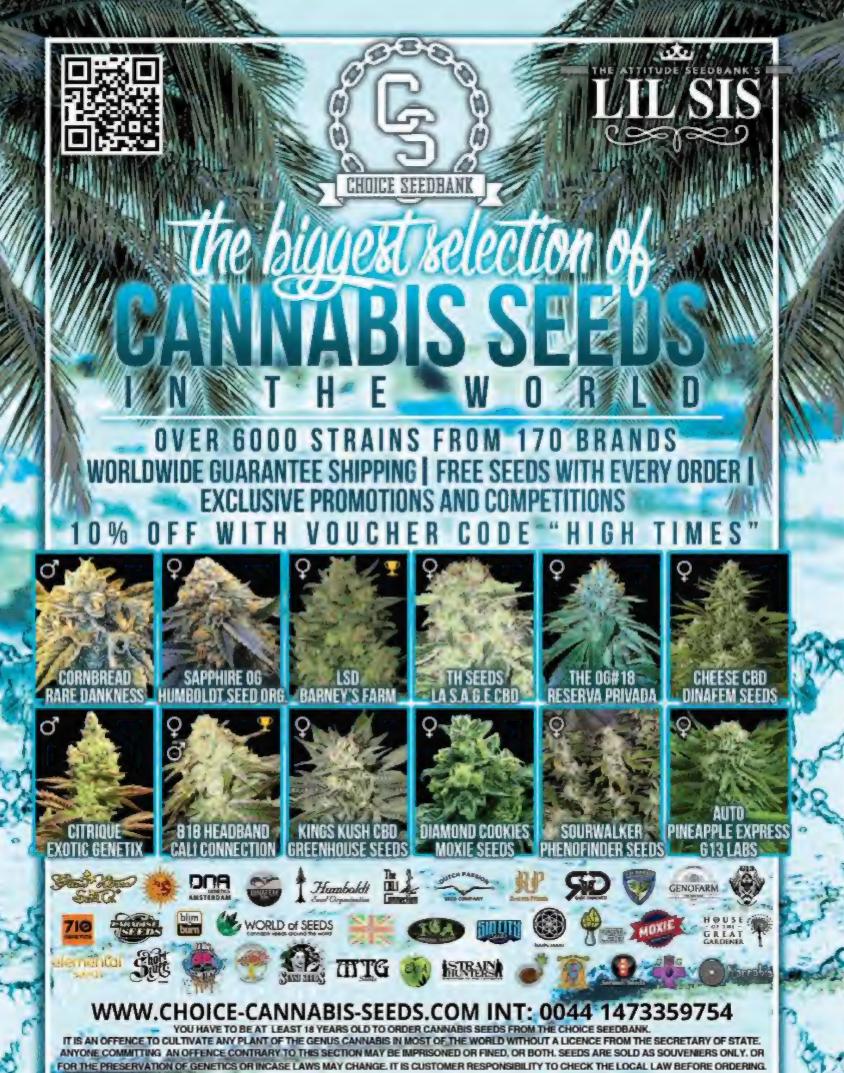
Butter: Hash made in this style has the consistency of peanut butter. It usually glistens with a

little sheen of oil and appears to sweat a bit when it's warm. Butter tends to be slightly lower in THC because it contains a lot of plant waxes. But it can be made with very high terpene concentrations, which means that it can offer a powerful flavor.



Live resin: This type of hash is made by processing plants that are freshly cut and some-

times fresh-frozen. When done at an advanced level, live resin is extremely flavorful and tastes like a fresh cannabis plant smells. It usually has a fuller cannabinoid profile too, meaning that it can be rich in secondary cannabinoids like CBN, CBG and THCa. This is a product with an expiration date, however: Live resin is not the kind of hash that you can archive and store for long periods of time. **





Battle at the Ballot Box

In this election year, the naked self-interest of pot prohibitionists is on full display.

Allen St. Pierre is executive director of NORML. Visit norml.org.

HE DARK FORCES opposing marijuana legalization are doing their malevolent best to thwart policy reforms that, according to the national polling firm Gallup, nearly 60 percent of Americans support. In states with binding voter initiatives on the ballot that would end cannabis prohibition and replace it with tax-and-regulate policiesmost notably Arizona, California and Massachusetts-the prohibitionists are out in force.

In Arizona, one of the largest donors seeking to defeat a marijuana-legalization initiative is the Arizona Wine and Spirits Association, which donated \$10,000 to an anti-pot group largely run by the state's prosecutors and lawenforcement officials. However, considering all the harm that's been caused by alcohol, pro-reform organizations have called on the anti-pot folks to return this hefty donation so as not to be hypocrites.

In California, Paul Curry, a lobbyist for the California Correctional Supervisors Organization, told the investigative website *The Intercept* that "the membership of CCSO opposes the full-blown legalization of marijuana." According to Curry, prison-guard supervisors don't want a society that encourages pot use, since many of the CCSO's members are grandparents concerned about their children. "If marijuana is not a dangerous drug,



the federal government would have made a change," Curry proclaimed, "but the fact remains that it's a federal crime."

Troublingly, of all the entities seeking the continuation of pot prohibition, there's one influential union *not* affiliated with cops or prison guards that publicly opposes legalizing marijuana: the Teamsters. Why? Guess who drives and delivers all those alcohol products.

In Massachusetts, anti-pot "researchers" have been stepping into the debate. The police, prosecutors and Big Rehab, as well as a politically powerful triumvirate consisting of the governor, the state attorney general and the mayor of Boston, have publicly opposed the legalization measure on the ballot in November.

Thankfully, when it comes to their views on legalizing pot, elected officials, unions, the alcohol industry and even law enforcement are not monolithic. In

California, no less than the state's chiefexecutive-in-waiting, Lieutenant Governor Gavin Newsom, strongly supports ending cannabis prohibition. He's joined by dozens of state and federal officials, including the current California attorney general, Kamala Harris. And while the Teamsters in California oppose legalizing pot, more forward-looking unions, like the United Food and Commercial Workers, are reaching out to recruit and enroll workers from the cannabis industry, citing it as one of the few new industries that unions can successfully organize.

Meanwhile, a recent article in Beer Advocate reveals that many leaders in the craft-brew industry are keenly in favor of legalizing cannabis. (California's Lagunitas Brewing Company is one.) Additionally, one of the most important drug-policy reform groups, Law Enforcement Against Prohibition (LEAP), will be flexing its muscles this election season, with its members prominently featured in political ads making the case for cannabis legalization like few others can.

In short, now is the time, and this is our year. Cannabis consumers, cultivators and sellers, and all lovers of liberty, must flood the voting booths this November to defeat the parochial interests that have kept marijuana illegal for too long. 💥

FREEDOM FIGHTER

By Kevin Mahmalii, NORML national outreach coordinator

Keepin' the Heat On in Florida

Legal skills and genuine compassion produce results.

Dedication and passion are two words that suit Michael Minardi to a T. Michael, who fights to repeal Florida's archaic cannabis laws while defending the rights of medpot patients, is one good reason that Florida can now be counted among the most fertile states in the nation for marijuana-law reform.

Since June of 2015, many municipalities in the Sunshine State have embraced commonsense decriminalization measures. With the assistance of Florida NORML, Michael has worked to convince county commissioners and City Council members that incarcerating nonviolent marijuana consumers is a travesty of justice.

As a criminal-defense attorney, Michael has successfully defended

several med-pot patients in cases that have resulted in landmark decisions, Most notably, he won Florida's first medical-necessity defense in a jury trial in

March 2015. His client list includes veterans who suffer from PTSD as well as people with HIV, chronic pain, depression, glaucoma, anxiety, fibromvalgia, severe anorexia and other medical conditions.

You won't find the word complacency in Michael's vocabulary.

A stalwart activist, he serves on NORMI's Legal Committee and is a board member of the Silver Tour. Florida NORML and CannaMoms. He's also leading the charge to legalize and tax marijuana like alcohol as the campaign manager and senior adviser for the Regulate Florida campaign

"I will continue to fight and advocate for change until all people are free to cultivate, use and benefit from cannabis, across the country and the world," Michael vows.

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THE ATOMIK AGE

Jay, the CEO of Atomik, explains why his cannabis-infused products are cleaning up at the Cannabis Cup.

So how did you start making cannabis-infused products?

My first experience with infused cannabis was back in 2001, at a collective in Oakland, CA, the day I got my first doctor's recommendation. I asked the budtender to show me the strongest stuff they had. After showing me some honey oil, he showed me what he called honey bud. I had never seen anything like it before. It was high quality bud that had

been sprayed with honey oil. It looked so amazing I had to try it. It was a great experience that I will never forget. I was higher than I'd ever been.

Fast forward to a few years ago, a friend from Northern California told me he was dipping his bud in hash oil and smoking it. It reminded me of honey bud that I smoked back in 2001. Since there had long been a personal connection with the product, I decided to investigate

the honey bud. Right away we noticed three things. First, adding concentrates made the buds smoke a lot slower. Second, we could turn buds with 20 percent THC into buds with 50-60% THC. Third, this combination makes you really, really high.

But we were still able to smoke it in traditional methods pipes, bongs, joints and whatnot. We immediately started making them for our dispensaries and delivery services and just called them "moonrocks."
After we found there was some brand confusion we repositioned ourselves and launched the brand Atomik with moonrocks as one of our products.

Is "moonrocks" a generic name?

Yes. Honey bud, moonrocks, caviar are all common terms used to describe products in the infused cannabis category. We launched branded

moonrocks last year. Our Atomik Moonrocks have won multiple 1st place trophies at the High Times Cannabis Cup for Best Infusion.

What makes Atomik different than other infused cannabis brands?

We offer seven different lines of infused cannabis moonrocks.

Our Atomik Gold & NRG Moonrocks are made with a closed loop BHO wax. Our ICE line is made with CO2 hash oil, which is kind of the industry standard for infused cannabis. Our Platinum line utilizes both BHO and CO2-derived hash oils. Our Atomik Klear is a collaboration with The Clear Concentrates. They provide the solvent-free wax which we infuse right into the buds. The latest test score on the Klear was 55 percent THC. The Atomik Diamond Moonrocks are produced with wax on the inside, shatter around the outside and then crumble on top of that. The presentation of the Diamond just jumps out of the box when you see it. At 65 percent THC, SC Labs confirmed it was the highest potency product of its kind they had ever tested. Last but not least is the Atomik CBD Line, infused with award-winning CBD hash oil.

We believe Atomik is a great name, a great concept for really potent cannabis, and a great company to work for. We pride ourselves on quality, potency and consistency. Our partnerships and our sustainable licensed growing and extraction facilities throughout California ensure that we can provide a reliable supply chain to dispensaries and consistent product that patients can count on.

A lot of people in the industry wonder why this is being done. Isn't a bud good enough on its own?

Atomik Moonrocks were designed for the bud smoker who wants to take their high to the next level. Many patients are buying bud from their local dispensaries, which unfortunately, is not effective in getting them the high they're looking for. By taking buds and putting concentrates inside of them, we are able to double, even triple, the potency. Our products are a great solution for these patients as we have a variety of options.

Also, infused cannabis could be considered the middle ground between smoking traditional bud and dabbing wax. Among the younger generation, dabbing has become very acceptable. But some of the more mature patients are not that into the idea of dabbing. Maybe they have kids, maybe they don't want the equipment or don't want to have to blowtorch something to get high. Atomik is the perfect solution for these smokers seeking a higher potency product, which they can smoke using traditional methods.

How do you actually infuse the product?

We use a proprietary process to infuse our buds. This process ensures that each and every Atomik Moonrock will be consistently infused with concentrate all the way down to the stem. Because it is our mission to provide high quality products



in which the value always exceeds the cost, we refuse to utilize methods in which the bud is only partially infused. We believe exceeding patient's expectations and developing loyal followers is critical to our success. No matter where or what a patient gets by Atomik, they will know they are getting consistent, high quality, multi award-winning products.

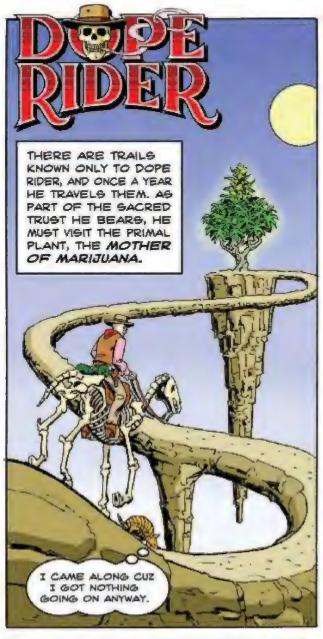
Do patients find these effective?

Yes. For patients who are looking to get high, Atomik Moonrocks are extremely effective. With THC levels ranging from 50-65% this product is not designed for lightweights. The effect is like taking a dab of concentrate but you smoke

it like it's bud. Experienced patients have reported a feeling similar to the first time they ever got high.

People with true medical needs generally gravitate toward our Atomik CBD line. Atomik CBD is a collaboration with Pop Naturals, a well-respected multiple awardwinning CBD brand. They provide the cannabis-based CBD oil, which varies from 60-70 percent CBD. We infuse that into the bud and cover it with our CBD kief. This combination usually generates an Atomik Moonrock with around 40 percent CBD and 10 percent THC when complete. I think the blend of CBD and THC is where medical patients really experience the most effective relief.





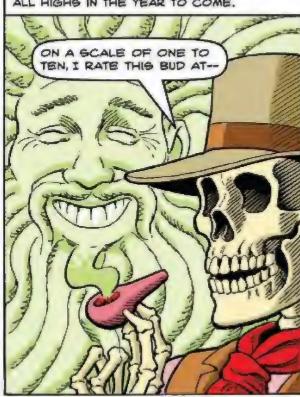
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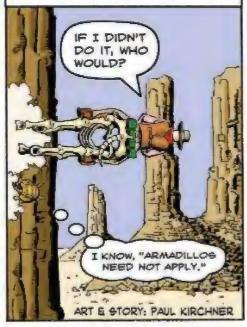
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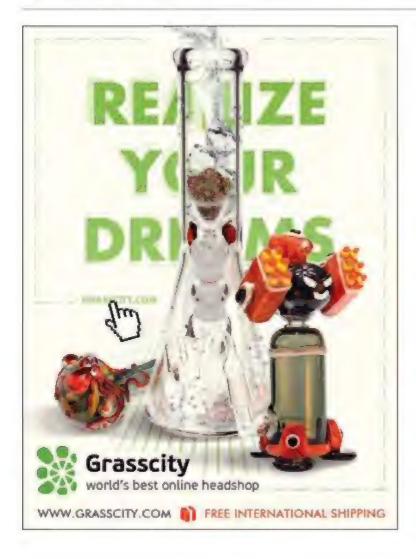
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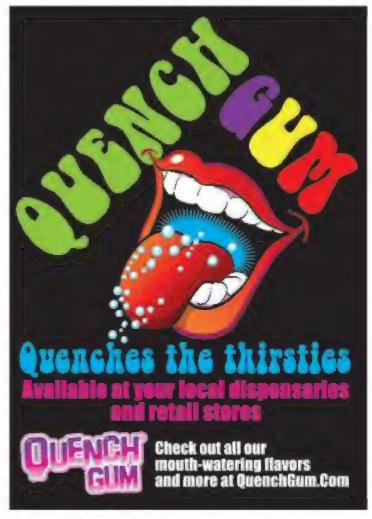


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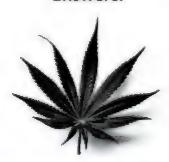
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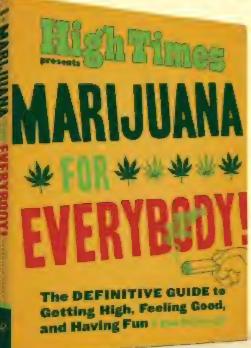
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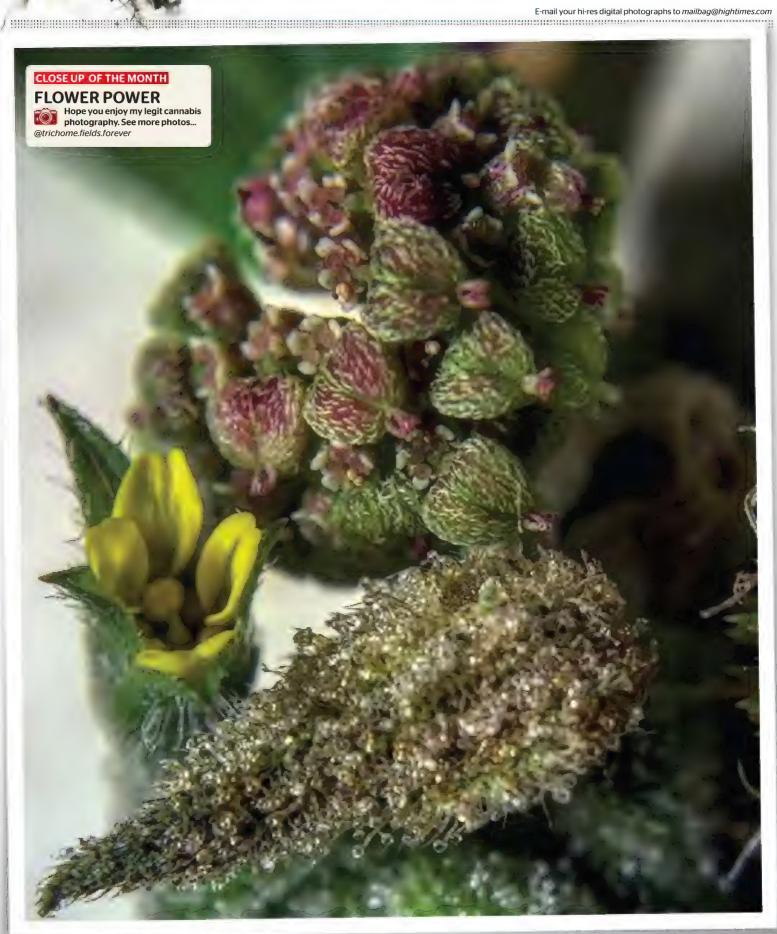








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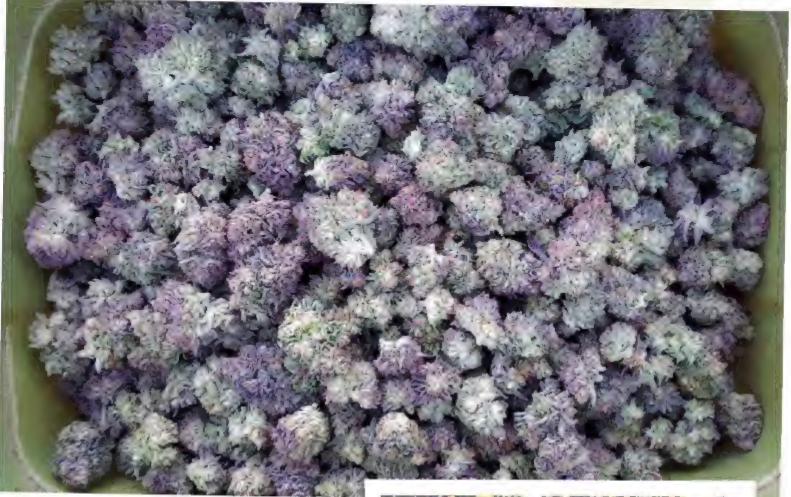


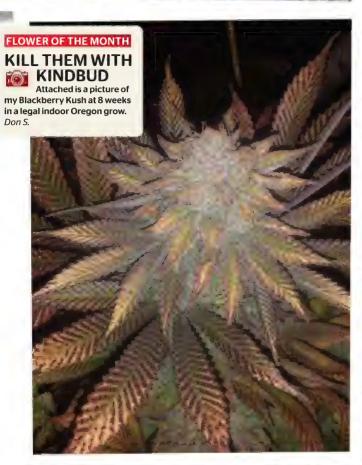
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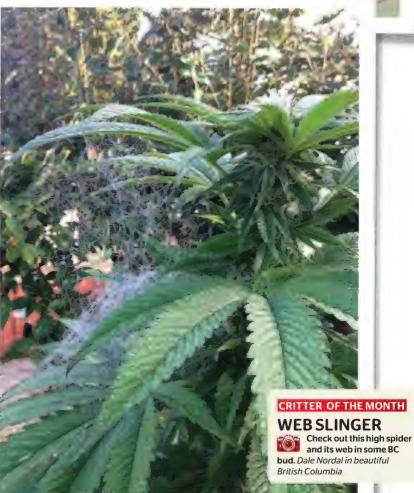
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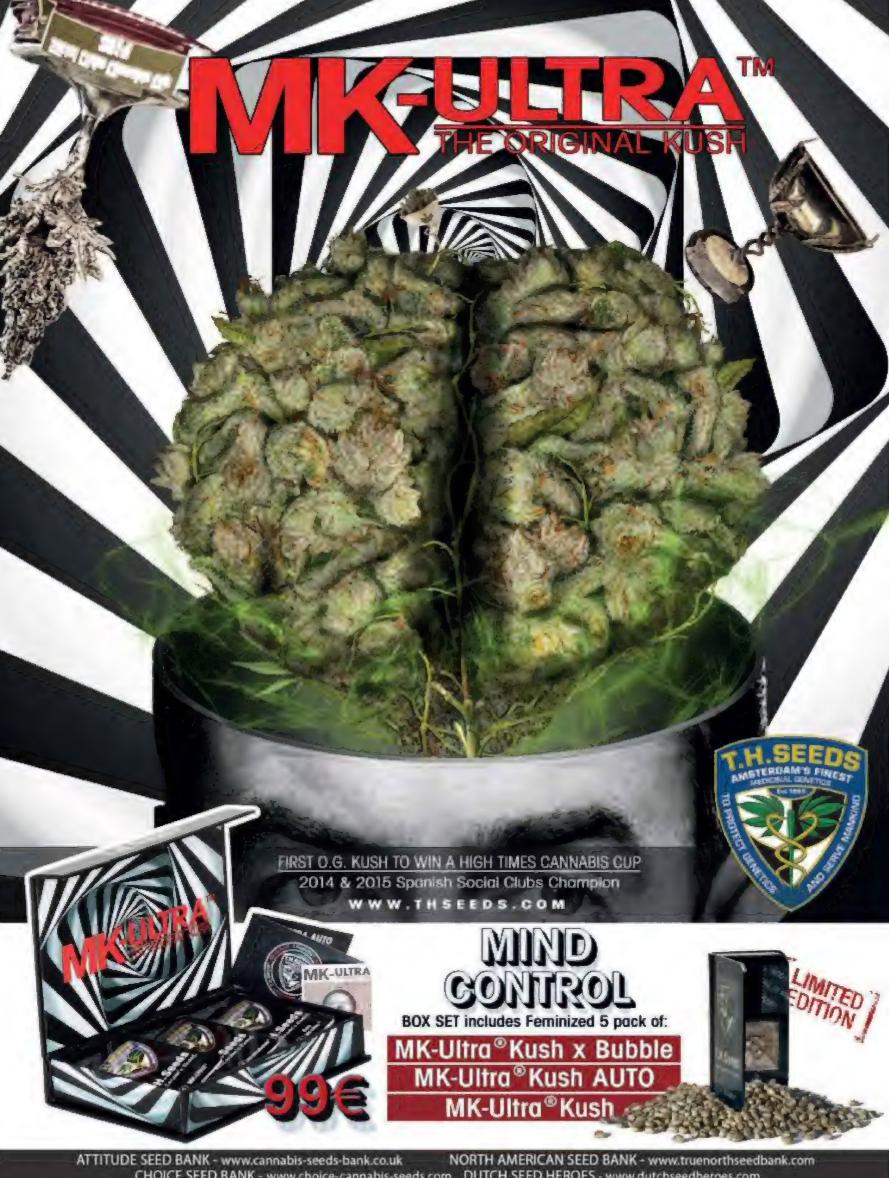


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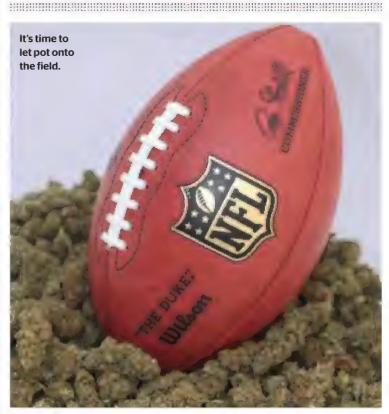






November 2016

HIGHTIMES



The NFL & Pot

Cannabis in professional football is an issue that's heating up the gridiron. A host of former NFL players weigh in on why the National Football League should allow its athletes to use cannabis freely and without penalty.

The Great Vape Pen Review

Want to know which vaporizer is best for you? For the third consecutive year, we tested more than 60 vape pens to find the ones that have the best design and durability, offer the most stealth, and deliver the biggest hits.

Pot of the Pacific Northwest

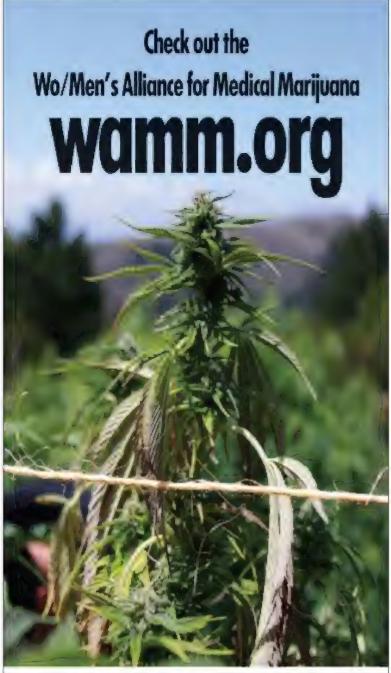
Check out this award-winning, automated ganja garden in Oregon run by High Winds Farms, which produces a perpetual harvest of high-quality pot on a massive scale.

Election 2016

This is it! Historians will look back on this year and declare that 2016 was the tipping point for the end of pot prohibition in America. We examine the prospects for marijuana freedom and list the most pot-friendly candidates.

Melissa, Music & Marijuana

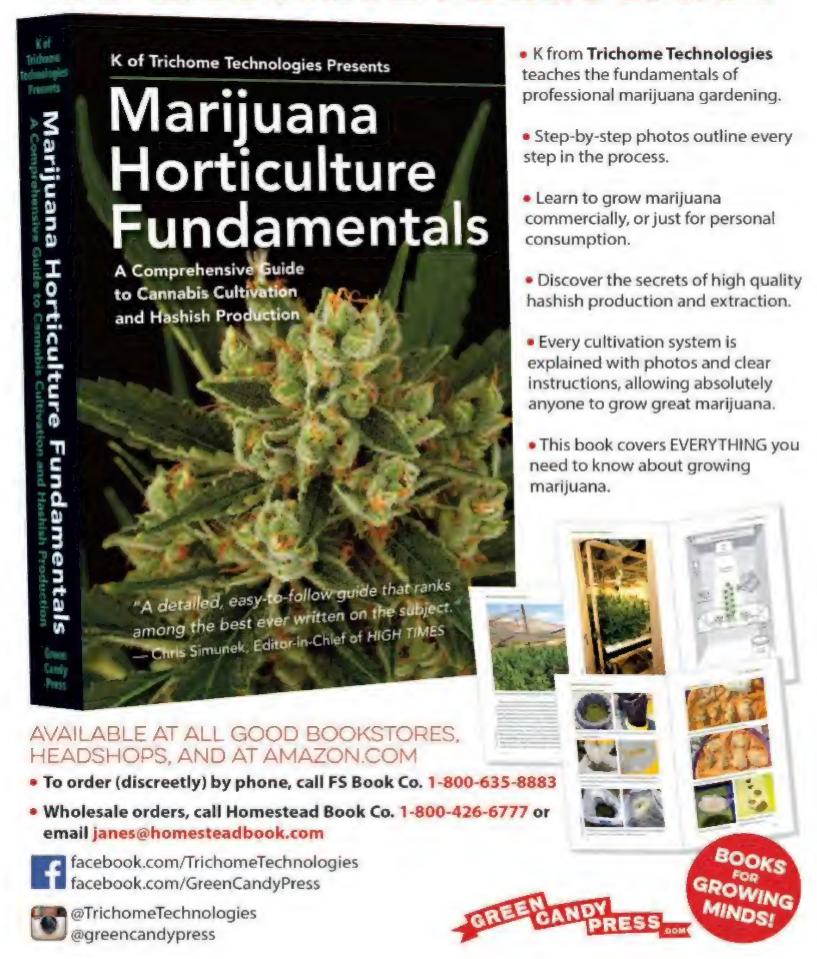
Legendary rocker Melissa Etheridge headlined this year's Michigan Medical Cannabis Cup, where she sparked up a joint onstage and proudly declared her love for the herb. HT culture editor Mary Jane Gibson asks the influential performer about activism, music and manifesting destiny.



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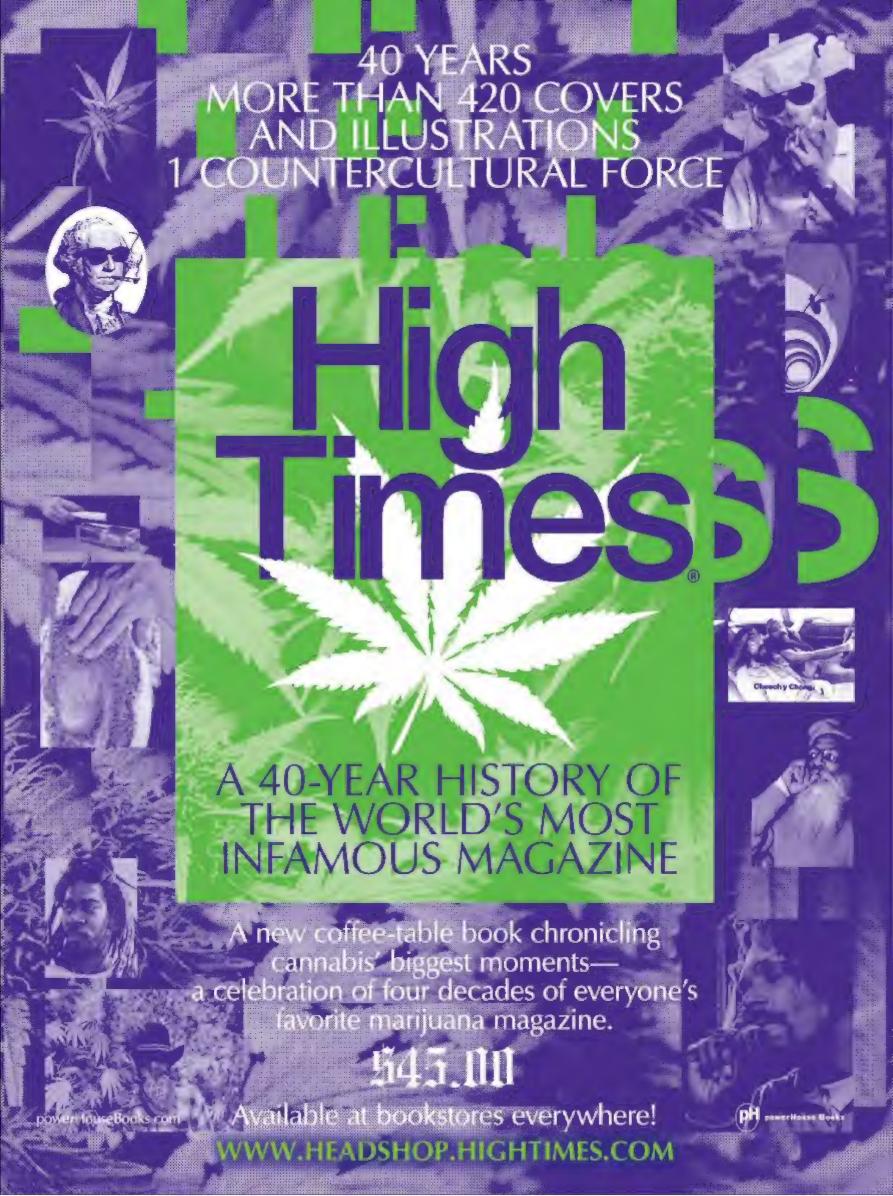
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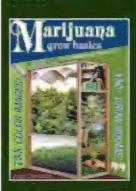
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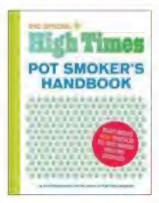
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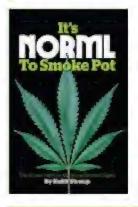
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